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MASS LEARNPIKE

Network for Learning

UMASS/AMHERST
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Program Guide Winter/Spring 1997

Award-Winning Distance Learning Network
Covering all Subject Areas and
Grade Levels with Special Emphasis
on Professional Development

GOVERNMENT DOCUMENTS
COLLECTION

OCT 3 0 1999

University of Massachusetts
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PROFESSIONAL DEVELOPMENT POINTS

MCET
Massachusetts Corporation for
Educational Telecommunications

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Governor

Argeo Paul Cellucci
Lieutenant Governor

The Mass LearnPike and Mass Ed OnLine LearnNet are operated by the Massachusetts Corporation for Educational Telecommunications

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Director of Programming and Production

David Parker
Director of Operations

P. Cardie Texter, Ph.D.
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Janet Wasserstein
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Designated Attendee*
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WGBH Educational Foundation

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Palmer Public Schools
Palmer High School

Kathleen Kelley
President
Massachusetts Federation of Teachers

John LeBaron
Associate Professor of Education
UMASS/Lowell

Michael J. Pietrowski
Audio Visual Director
Mashpee Public Schools

MCET Office and Studio
One Kendall Square, Building 1500
Cambridge, MA 02139-1562
Phone: (617) 252-5700
Fax: (617) 252-5709

Resources

MCET Customer Service
(800) 556-4376

E-mail
help@mcet.edu

Website
http://www.mcet.edu

NWS Satellite Trouble
(800) 528-7749

MFT (Massachusetts Federation of Teachers)
(617) 423-3342

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MCET

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Message from the Chairman

As we embark upon a fresh new year, we at MCET are following an exciting workplan of streamlining services, implementing new technology solutions, and introducing new initiatives in education through funding from our generous supporters.

The operation of the Mass LearnPike (MLP) satellite network and the Mass Ed OnLine LearnNet (MEOL) computer network continues to position the Commonwealth of Massachusetts as a national leader in the field of distance learning. This agency will always play a critical role in providing educational resources to students and teachers by expanding teaching and learning opportunities through multiple distance learning technologies.

Always striving for excellence, MCET is committed to becoming more entrepreneurial, enterprising, and competitive in its approaches to the marketplace today, tomorrow, and in the years ahead. We are excited about the potential of expansion this year so that we can offer increased access and continually improved services to all of our constituencies.

Thank you for your support.

Richard J. Snyder, Esq.
Chairman, MCET

Message from the Executive Director

As MCET prepares for the second half of the 1996-97 school year, I would like to extend a warm welcome to all the current members of our MCET family and to those of you who are new to the Mass LearnPike educational satellite network.

We have taken great pride in developing the LearnPike Broadcast schedule for the winter and spring 1997 semesters. By listening and responding to our teachers' requests, we have included past favorites, such as *New England Aquarium's World of Water* and *Learning to Lead,* as well as a wide array of new and exciting educational programs.

In addition, we will be offering new programs generated from our recent partnerships with the University of Massachusetts, and the Annenberg/ Corporation for Public Broadcasting Math and Science Project.

Furthermore, MCET is proud to announce its newest initiative, "Safe and Drug-Free Schools and Communities" programming via funding from the United States Department of Education.

As usual, we place a top priority on customer service and we encourage you to take advantage of the Help Desk (1-800-556-4376) and the various options that are free to members, including site visits, online support, and satellite programs. Working together, we will continue to elevate the power of telecommunications to all of our schools and communities across the country.

Best wishes for the winter and spring terms.

John G. Flores, Ph.D.
Executive Director, MCET

ABOUT MCET ...
AN AWARD-WINNING NETWORK

Established by the Massachusetts Legislature in 1982, the Massachusetts Corporation for Educational Telecommunications (MCET) provides telecommunications services through multiple technologies to students and educators in Massachusetts and 27 states nationwide. This includes daily satellite broadcasts, computer networking for E-mail and links to the Internet, videotapes and videodisks, as well as technical training and content support for participants. The Cambridge-based corporation serves a broad base of educational institutions, non-profit agencies, government services, and businesses.

The Mass LearnPike

MCET's educational satellite network, the Mass LearnPike brings learners of all ages together from widespread locations for live interaction and new relationships with peers, teachers, performers and distinguished leaders in government, education and business.

Programs for K-12 are designed within the emerging national and state curriculum frameworks to serve the Common Core of Learning, including staff development modules for in-service and pre-service educators. Mass LearnPike resources consist of satellite broadcasts, print and non-print materials and communication opportunities that link educators, learners and other professionals nationally and internationally.

Mass Ed Online LearnNet

The Mass Ed Online LearnNet (MEOL) is the official link between educators in Massachusetts, the Department of Education, and MCET. Its mission is to use information technology to improve lifelong learning and teaching in the Massachusetts education system while contributing to economic development and fostering greater educational equity within the Commonwealth.

The Mass Ed Online LearnNet is an MCET initiative which is a part of Mass Ed Online, the Commonwealth's overall Educational Technology implementation. It provides:

- A communications on-ramp to the Global Internet
- Access to worldwide electronic mail and news
- The World Wide Web with its millions of pages of information
- Access to libraries, databases, documents, and images
- An opportunity to exchange information with colleagues and state educational agencies
- Access to Mass LearnPike presenters and staff
- Information resources to enrich teaching

If you are interested in further information about this exciting educational resource or if you would like to obtain an account please write or call us at (800) 556-4376 or visit us on the web at http://meol.mass.edu.

Distribution

In the event of technical difficulty, MCET will rebroadcast all affected programs. Program schedule information will be available on the satellite network between programs and electronically at http://www.mcet.edu.

For a fee of $25, MCET will provide a tape of any broadcast to registered sites.

Program

Live and taped Mass LearnPike programs may be shown over any internal distribution system serving constituent schools and districts. Mass LearnPike members and subscribers may provide MCET programs for broadcast over non-commercial, local cable channels in compliance with local cable agreements.

Internet
National subscribers with Internet access to the World Wide Web can point to http://www.mcet.edu. The MCET site has detailed information on individual programs, program schedules, updates on any new programs or scheduling changes, and online registration. Look under either *programs* or *customer service*. This information can also be found through MEOL at http://meol.mass.edu.

Materials Policy

MCET will supply one master set of print material per registered teacher. This will include registration confirmation, technical specifications, and print and/or non-print materials intended for use before, during and/or after each program session. For non-print material, MCET will offer resources according to the number of participants indicated on the registration form, as supplies allow. MCET cannot guarantee any materials for late registrants.

Copyright Policy

MCET programs are restricted to the exclusive use of Mass LearnPike member schools, their students, teachers, staff, parents and communities. MCET reserves all ownership and copyright of Mass LearnPike distance-learning programs, instructional materials and other intellectual property.

Taping Policy

MCET programs are designed for live, interactive participation. Members may videotape or otherwise record MCET programs to accommodate school schedules. All tapes may be retained until the end of the current academic year, at which time they must be erased.

Sign Language Interpretation

If there is more than one site with hearing-impaired participants who wish to participate live and do not have an on-site interpreter, MCET will make a reasonable effort to provide an on-camera sign-language interpreter. A month's notice is required.

Higher Education

MCET is dedicated to increasing the level of programming for the higher education community. Membership includes:

- All Mass LearnPike programs
- Materials for any Mass LearnPike program for which you register
- Access to Mass Ed Online LearnNet
- Access to MCET production and transmission facilities at member rates, including studios, uplink and production van and videoconferencing room
- All MCET communication with members, including "Program Guides," newsletters and planners
- Participation in the request-for-proposal process (see page 9)

Optional service:

- Participation in MCET bulk-purchasing initiatives such as satellite downlinks or other program services

For additional information, please contact MCET at (617) 252-5700 ext. 759.

NASA Project

A dynamic learning program about aviation and aeronautics integrating the use of the Internet, interactive curriculum via satellite, and desktop video teleconferencing is being offered to students through a cooperative agreement (NOC 2-915) from the National Aeronautics and Space Administration (NASA), High Performance Computing and Communications Office (HPCC), as part of the Information Infrastructure Technology and Applications (IITA) Program, to MCET.

The aim of the program is to create projects to inform students about aviation and aeronautics both as an academic focus and a career path. Known as Aeronautics and Aviation Science Careers and Opportunities (AASCO), the project reaches students nationwide.

Schools in Massachusetts—East Boston, Dorchester, Malden and Randolph—and at community-based organizations in Boston and Springfield, MA; New York, NY; Hartford, CT; and Washington, DC will engage in all project components.

Students in grades 6-12 and first- and second-year college students will use multiple technology links, especially online communication through the MEOL digital computer network, to share curriculum, communicate with teachers and specialists, and access the Internet and to create a project site on the World Wide Web (WWW).

Integral to the project design will be:

- two seven-part live, interactive satellite series
- two-way audio connections
- desktop video-conferencing technologies
- interaction among students and teachers
- an aeronautic curriculum kit
- development of bilingual and close-captioned programming
- print materials

Developed in collaboration with the New England Regional Office of the Federal Aviation Administration and Bridgewater State College, the MCET project emphasizes optimum communication capacity through the use of computers and other communications media.

The Human Genome Project: Exploring the Scientific and Humanistic Dimensions

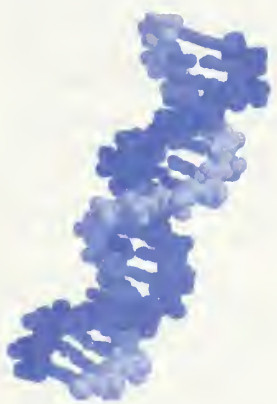
The Human Genome Project's interactive Web site is up and running. Come surf at:

http://www.mcet.edu/humangenome

Learn, and expand your mind. Debate real life issues with professionals, students, and teachers from across the globe, and those who can share first hand experiences. Explore:

- **Student Showcase:** submit your student's work related to the Human Genome Project
- **Chat Room:** check out the monthly dilemma and offer your comments
- **The Zone:** our interactive area for Grades 9+
- **The Resource Center:** bibliographies, current articles, interactive classroom activities, and a message board for teachers only to exchange ideas.

This project is supported by the National Institutes of Health, National Center for Human Genome Research, ELSI program, award number R25 HG00661.



HealthLinks

MCET is proud to be the recipient of its third round of U.S. Department of Education Star Schools funding, a national distance-learning initiative that brings educational resources to traditionally underserved learners across the country. Under the leadership of MCET, **the HealthLinks project is using telecommunications and other technologies to improve access and provide resources in health, literacy and work readiness for at-risk youth and young adults.** HealthLinks' demonstration sites include schools and community-based organizations in five urban communities: Springfield and Boston, MA; Hartford, CT; New York, NY and Washington, DC. Many nationally recognized education providers and organizations are partnering with MCET in delivering an extensive array of services, training and educational programs to project participants. HealthLinks provides training and technical assistance to the project/demonstration sites through a range of activities, including workshops and summer institutes, electronic mail, satellite teleconferences, multipoint videoconferencing and site visits. Teams at each site work closely with project partners and staff to integrate effectively an array of project technologies into the curriculum, including satellite broadcasts, computer-based networks, videoconferencing, fax, videotape, interactive videodiscs, and CD-ROM. HealthLinks's broadcasts on the Mass LearnPike are available to all MCET members. The programs this spring will explore a variety of health and social issues.

Star Schools
U.S. Department of Education

Annenberg/CPB Channel

For the 1996-97 broadcast season, MCET is pleased to introduce a new series of mathematics and science professional development Mass LearnPike (MLP) programs and MEOL services. With funding from the Annenberg/CPB Math and Science Project and in partnership with Harvard University and the Smithsonian Institution, MCET will offer the Annenberg/CPB Math and Science Project's collection through live, interactive broadcasts, taped videos and related activities on MCET's WWW site and the Annenberg/CPB Channel's WWW site:
http://www.learner.org/k12/acpbtv

Teachers can receive professional development points for participation in the interactive programs and optional graduate credit from institutions of higher education.

The mission of the Annenberg/CPB multimedia mathematics and science project is to engage as many adults as possible in the math and science reform movement. To this end, the Annenberg/CPB Math and Science Project over the past several years has funded more than forty systemic educational initiatives. One of those was the highly successful *Private Universe Project* professional development series which was produced and aired via MCET's satellite network in the fall of 1994 in collaboration with the Harvard-Smithsonian Center for Astrophysics.

Today, MCET, with its partners Harvard University and the Smithsonian Institution, faces a new challenge—the creation of the Annenberg/CPB television and web site service. In addition to a series of live, interactive broadcasts, MCET will distribute hundreds of hours of exemplary, taped mathematics and science programs over the MLP network. In the next two years, MCET will transmit up to five hours of A/CPB programming a day, four days a week as part of the MLP offerings.

Scheduling information about the 1997 winter-spring series and the Annenberg/CPB service is on MCET's home page and on pages 46-49 in this guide. We encourage participation in this professional development initiative.

PDPs: MCET'S COMMITMENT TO PROFESSIONAL DEVELOPMENT

Educators can now earn while they learn on the Mass LearnPike. Participants in MCET courses are now able to accrue points toward their recertification. MCET is an approved state-endorsed Professional Development Provider for Massachusetts educators.

For out-of-state members, MCET will issue certificates of participation to registered teachers confirming participation in PDP-designated programs.

MCET is committed to providing quality professional development activities and strongly believes its programming will help professionals with the following:

- Integration of the Common Core of Learning and the Curriculum Frameworks
- Application of current research including principles of adult learning and the organizational change process
- Technologies for classroom management, instruction and professional growth
- Models that promote multiple strategies for professional growth
- Opportunities to learn from peers across and within differing educational roles
- Encouragement of and support for experimentation and risk-taking
- Discipline-specific and interdisciplinary approaches to teaching, learning and assessment that incorporate high expectations for all students
- Developmentally appropriate strategies for instruction and curriculum that meet the needs of diverse student learners
- Strategies for reaching and involving families and communities
- Leadership skill training for school, administration and management
- Follow-up that focuses on the application of professional development to the improvement of student learning

MCET provides an opportunity for its viewers to earn PDPs for professional development programs as well as designated student programs. Programs designated with the star logo are deemed PDP programs for Massachusetts educators only. The number in the star indicates the number of PDPs.

Requirements

1. The school district must be an MCET member.
2. Educators must register for each program individually by the deadline indicated to earn PDPs.
3. Educators must participate in all sessions of the program, live or tape, to be eligible for PDPs. (If three sessions of a program are offered, one must participate in all three sessions in order to receive PDPs. The awarding of PDPs is at the discretion of MCET.)
4. An assessment form will be included in the material package. In order to receive PDPs, the form must be filled out indicating evidence of professional growth. Assessment forms must be returned to MCET by June 1, 1997.

MFT

MCET/MFT Partnership

MCET is pleased to continue its unique partnership with the Massachusetts Federation of Teachers (MFT) in sponsoring professional development programs.

PROFESSIONAL DEVELOPMENT POINTS

MCET professional development programming will be further enhanced by MFT's facilitated sites. Each session will begin with an MCET broadcast followed by a discussion focusing on the main ideas of the telecast in which participants will be encouraged to share their responses to the telecast and relevant classroom experiences.

The MFT is sponsoring three programs: *Telecommunicate II: Exploring the Internet, A Question of Science,* and *Annenberg/CPB Channel Live Interactive Workshop Series.*

The MFT will notify their respective members as to the location of facilitated sites. Questions regarding these sites should be directed to the MFT at (617) 423-3342.

In order to take advantage of this opportunity, educators' school districts must be MCET members and individual educators must be MFT members.

Requirements for earning PDPs for this special arrangement are the same as for all MCET PDP programs.

You may register through MCET or MFT.

MCET's Alignment With the Curriculum Frameworks and National Standards

MCET's programming, materials and products support and enhance the intent and spirit of the Massachusetts Education Reform Act of 1993 in utilizing distance learning and a variety of the latest technologies.

MCET is committed to delivering high-quality programming that embraces the national educational goals (emerging national standards) and Massachusetts Common Core of Learning and Curriculum Frameworks.

- Students learn by using a variety of strategies and approaches.
- Students explore how knowledge has purpose and meaning in their lives.
- Purposeful interaction is a vital ingredient for student learning.
- Curriculum is based on inquiry, problem solving, discovery and application of key issues and concepts.
- Assessment is a process and a tool to improve instruction and enhance student learning.
- Curriculum points to the connections within and across disciplines.
- Technology promotes important tools for enriching the learning process.

MCET's program-support materials and evaluation tools have been carefully researched and thoughtfully designed to align with the Massachusetts Common Core of Learning and Curriculum Frameworks.

Curriculum Frameworks Alignments are noted for each program where appropriate.

Solar Outages

During the spring and fall equinoxes, satellite communications are disrupted briefly by solar outages. This occurs when the sun, which is over the equator at this time, and a geosynchronous satellite which is also positioned over the equator, align on approximately the same axis at a particular time of day. The satellite dish on the ground sees the satellite and the sun. The sun's electromagnetic energy overpowers the weak satellite signal at the dish. These outages usually last for a few minutes a day over a period of a few days.

Anticipated solar outages for spring: March 2nd, 3rd, and 4th between 2:30pm and 2:40pm EDT.

MCET/UMass

As established this past fall, MCET is pleased to announce continued program offerings this winter/spring in partnership with the University of Massachusetts. Through MCET and the UMass faculty, all audiences will have the opportunity to participate in exciting programs for credit. For example, MCET will broadcast professional development programs, *A Question of Science: Science for K-8 Teachers,* and *Using Insects in the Classroom.* These programs will bring college offerings right to your classroom. We are very excited about our involvement with the University of Massachusetts on this endeavor and will be providing similar programming on a regular basis.

UNIVERSITY OF MASSACHUSETTS

Request for Mass LearnPike Proposals

MCET believes the Mass LearnPike and Mass Ed Online LearnNet are powerful vehicles that can bring new and unique resources to schools and communities. Interactive programs model effective teaching practices; encourage communication among students, educators and learning communities; and engage citizens in public dialogue.

An Invitation

MCET welcomes well-conceived, innovative proposals that support our educational mission and expand on MCET's core programming.

Proposed programs should:

- respond to the needs of the educational community
- utilize multiple technologies
- reflect current and significant educational issues and trends
- be aligned with the Massachusetts Curriculum Frameworks and/or national curriculum standards
- expand existing resources for schools and communities
- bring together a community
- be unique
- be developmentally appropriate
- enhance student learning and provide professional development opportunities
- incorporate critical and creative thinking skills for all learners

Proposals are considered preliminary plans. Once a proposal is selected for development, MCET staff will provide support in development of content, materials and a communications plan. Program developers/presenters will work collaboratively with MCET according to agreed-upon program goals and associated deadlines for planning, print production and video production. Programs originate from MCET broadcast facilities in Cambridge, Massachusetts. Proposals may not endorse a commercial product.

Proposal Narrative

Please submit a narrative that includes the following:

1. Proposal cover page
2. Executive summary (limit one page)
3. A description of how this proposal responds to the needs of the educational community
4. A description of the program goals, objectives and intended audience
5. A description of how this proposal aligns with national curriculum standards and/or the Massachusetts Curriculum Frameworks (Please be specific)
6. A description of the instructional strategies and methods, especially those that focus on critical and creative thinking
7. A description of the anticipated outcomes and how those outcomes are assessed
8. A description of participant activities planned for the programs (include pre- and post-broadcast as well as during the broadcast)
9. A description of how technology (computers, Internet, video footage, hands-on material, etc.) will be incorporated into this program
10. The number of sessions and corresponding topic for each session
11. A list of others who may participate in this program and their affiliation(s)
12. A description of any prerequisites or special requirements for participation in this program (e.g., one year of algebra, American history through the Civil War)
13. Your biographical information

Optional

1. Describe any already existing resources and/or curriculum you propose to bring to this project; e.g., video footage, teacher or student instructional activities, hands-on materials
2. List any potential funding sources that you currently have or suggest pursuing
3. Describe the size and scope of the potential audience for this project
4. Describe any specific targeted outreach/marketing you would recommend
5. Additional comments

Proposal Review Process

1. An acknowledgment will be sent after the proposal is received by MCET.
2. An internal review team will assess and give careful consideration to all proposals.
3. Decisions regarding selection for development will be made approximately two months after submission.

Proposals are accepted throughout the year.

Submit proposals to:
William Norris
Director of Programming and Production
MCET
One Kendall Square
Building 1500
Cambridge, MA 02139-1562

Please mark your envelope:
Program, Proposal

To receive Request for Proposal guidelines, please call our Help Desk at: (800) 556-4376.

Mass LearnPike Rebroadcast Specials

At the request of numerous MCET members the following programs will be rebroadcast as noted:

Aids Prevention Project

Program Code: 3180
Students 9-12

WED	**Jan. 8**	**12:00pm -12:50pm**	**1/1**
FRI	**Jan. 24**	**3:00pm - 3:50pm**	**1/1**

Using the Harvard Community Health Plan Foundation's First AIDS Kit, Dr. Susan Pauker provides students with information about:

- The facts of transmission of the AIDS virus;
- Prevention methods for AIDS and other sexually transmitted diseases, including abstinence, condom use, and safer sex practices;
- The importance of getting the facts and making informed choices about sexuality.

All About Visual Art: Great Works of Europe

Program Code: 6064P
Students 6-12 and Teachers K-12

FRI	**Mar. 7**	**1:00pm - 1:50pm**	**1/3**
FRI	**Mar. 14**	**1:00pm - 1:50pm**	**2/3**
FRI	**Mar. 21**	**1:00pm - 1:50pm**	**3/3**

This broadcast features video footage and images from some of the great cultural cities of France and Italy. Take an electronic field trip down the Grand Canal of Venice, see Michelangelo's sculptures in Florence, and the colorful gardens of Monet in Giverny. Teachers are presented with ideas for integrated activities.

Our Living World: The Changing Nature of Trees

Program Code: 6087P
Students 3-5

FRI	**Feb. 28**	**11:00am -11:50am**	**1/4**
FRI	**Mar. 7**	**11:00am -11:50am**	**2/4**
FRI	**Mar. 14**	**11:00am -11:50am**	**3/4**
FRI	**Mar. 21**	**11:00am -11:50am**	**4/4**

What changes occur in trees in the spring? What is folded into the bud of a tree? Apple trees have flowers, but do other kinds of trees have flowers too? In what ways are flowers alike and different?

Each session includes hands-on classroom activity and an inspection of live plant specimens from the Arnold Arboretum of Harvard University located in Jamaica Plain, Massachusetts.

Dinosaurs and You

Program Code: 6062
Students K-2

THR	**Jan. 30**	**2:00pm - 2:50pm**	**1/2**
FRI	**Jan. 31**	**2:00pm - 2:50pm**	**2/2**

This program involves young learners in a thorough, entertaining overview of current dinosaur theories, their anatomy, behavior, and environments with discussions of new dinosaur finds from around the world.

"Dino Don" Lessem and children demonstrate dinosaur size, speed, diversity and evolution through time. In addition to studying the differences between dinosaurs and other animals, children in the classroom explore how fossils are created and excavated.

Our Living World

Program Code: 6015P
Students 4-6

FRI	**Jan. 31**	**10:00am -10:50am**	**1/3**
FRI	**Feb. 7**	**10:00am -10:50am**	**2/3**
FRI	**Feb. 14**	**10:00am -10:50am**	**3/3**

Dr. Donna Fernandes brings an exotic collection of live specimens into the studio to illustrate the characteristics shared by all insects, the range of habitats in which they live, and the strategies they employ to make it through the winter. Hands-on classroom activities encourage a better understanding of how insects communicate, find food and avoid predation.

Learning Through Drama

Program Code: 6026P
Students 3-5

WED	**Jan. 15**	**3:00pm - 3:50pm**	**1/5**
WED	**Jan. 22**	**3:00pm - 3:50pm**	**2/5**
WED	**Jan. 29**	**3:00pm - 3:50pm**	**3/5**
WED	**Feb. 5**	**3:00pm - 3:50pm**	**4/5**
WED	**Feb. 12**	**3:00pm - 3:50pm**	**5/5**

This series uses interactive drama and role-play as primary approaches to learning about human perception. Through drama, students explore their thoughts and feelings about diversity and examine issues facing our society. The dramas require critical thinking and problem-solving as students consider the connection between perceptions, assumptions, stereotyping, bias, and discrimination.

Electronic Field Trip: Discovering Boston's Oldest Synagogue

Program Code: 3039
Students 6-8

WED	**Jan. 8**	**3:00pm - 3:50pm**	**1/1**
FRI	**Jan. 17**	**1:00pm - 1:50pm**	**1/1**

Participants will "visit" the Vilna Shul on historic Beacon Hill, the oldest standing Jewish synagogue in Boston that is still in its original (1919) architectural from and on its original site.

Board of Education Meetings

In our continued partnership with the department of education, MCET will rebroadcast the Board of Education meetings:

FRI	**Jan. 17**	**4:00pm - 8:00pm**
MON	**Feb. 10**	**4:30pm - 8:30pm**
MON	**Mar. 10**	**4:30pm - 8:30pm**
MON	**Apr. 14**	**4:30pm - 8:30pm**
MON	**May 12**	**4:00pm - 8:00pm**
MON	**Jun. 16**	**4:00pm - 8:00pm**

As we wander through the old synagogue, students will be guided by Susan Wilson as they "read" the Vilna Shul and its contents: What do we know about these people and their interests, skills, economic status, beliefs, and dreams from the existing building and the objects therein?

Mass Performance: The Wooden Horse Russian Puppet Theater

Program Code: 3062
Students K-2

FRI	**Jan. 10**	**11:00am - 11:50am**	**1/1**
FRI	**Jan. 17**	**3:00pm - 3:50pm**	**1/1**
THR	**Feb. 13**	**2:00pm - 2:50pm**	**1/1**
WED	**Mar. 19**	**3:00pm - 3:50pm**	**1/1**
MON	**Apr. 7**	**10:00am - 10:50am**	**1/1**
WED	**May 28**	**11:00am - 11:50am**	**1/1**

According to Igor Fokin, the creator of his own puppet theater, *The Wooden Horse*, "This kind of theater is made for everyone, for all classes and all ages. That's why it was so popular in Old Russia."

Theater director Yelena Demikovsky visited Fokin in his St. Petersburg studio, videotaped him in the process of creating new characters, and followed him to Boston.

Mass Performance: The Underground Railway Theater

Program Code: 3059
Students 6-8

FRI	**Jan. 10**	**3:00pm - 3:50pm**	**1/1**
WED	**Jan. 22**	**11:00am - 11:50am**	**1/1**

The Underground Railway Theater explores stories and myths that address questions about values, so that in making shadow-puppet productions of these stories, students are faced with questions about interpretation and values.

The Underground Railway Theater will tap into the more than 100 stories about the Flemish trickster Tyl Eulenspiegel. The session will feature a performance of the shadow-puppet pantomime to "Till Eulenspiegel's Merry Pranks," a tone poem by Richard Strauss.

Mass Performance: Little Theatre of the Deaf

Program Code: 3163
Students 3-5

MON	**Jan. 13**	**3:00pm - 3:50pm**	**1/1**
FRI	**Jan. 24**	**11:00am - 11:50am**	**1/1**

Little Theatre of the Deaf has been bringing live theatre to young audiences around the world since it was established as part of the award-winning National Theatre of the Deaf in 1968.

The Story Bag is presented with the group's innovative combination of sign and spoken language, an approach that promises to educate and entertain youngsters with a sampling of the world's literature and an assortment of little-known facts and amusing anecdotes.

Mass Performance: Journey Into Jazz

Program Code: 6004
Students K-5

WED	**Jan. 15**	**11:00am - 11:50am**	**1/1**
FRI	**May 2**	**12:00pm - 12:50pm**	**1/1**
FRI	**May 9**	**12:00pm - 12:50pm**	**1/1**
FRI	**May 16**	**12:00pm - 12:50pm**	**1/1**
FRI	**May 23**	**12:00pm - 12:50pm**	**1/1**
FRI	**May 30**	**12:00pm - 12:50pm**	**1/1**

To highlight the social and historical significance of the African-American musical legacy, Semenya McCord's acclaimed jazz group will perform spirituals, blues, and songs of the swing and bebop eras.

Teacher in Electronic Residence (TIER)

Program Codes: 3103, 3104 & 3106
Teachers K-12

FRI	**Apr. 4**	**12:00pm - 12:50pm**	**1/3**
FRI	**Apr. 11**	**12:00pm - 12:50pm**	**2/3**
FRI	**Apr. 18**	**12:00pm - 12:50pm**	**3/3**

Each session, an outstanding Massachusetts teacher presents and discusses his/her innovative and award-winning work. Whenever possible, the session will feature videotaped footage of the teacher working in the classroom.

Session I
Teachers K-2
Bobbi Fisher: Shared Literacy—Engaging All Students in the Love of Literature

Session II
Teachers 6-8
Karin Taylor, Michael Browne, and Tony Da Rocha: Project Adventure—Incorporating an Innovative Approach to Physical Education Throughout the Curriculum

Session III
Teachers 9-12
Jerry Howland: Mock Trials in the Classroom

Geology

Program Code: 6053P
Teachers 6-8

WED	**Jan. 22**	**12:00pm - 12:50pm**	**1/8**
WED	**Jan. 29**	**12:00pm - 12:50pm**	**2/8**
WED	**Feb. 5**	**12:00pm - 12:50pm**	**3/8**
WED	**Feb. 12**	**12:00pm - 12:50pm**	**4/8**
WED	**Feb. 26**	**12:00pm - 12:50pm**	**5/8**
WED	**Mar. 5**	**12:00pm - 12:50pm**	**6/8**
WED	**Mar. 12**	**12:00pm - 12:50pm**	**7/8**
WED	**Mar. 19**	**12:00pm - 12:50pm**	**8/8**

This eight-part series will present concepts using the rock cycle as a flow of logical causes and effects rather than disjointed separate ideas. Lava, magma, minerals and the resultant igneous rocks are used as examples. Plate tectonics, crustal movement, mountain-building, and metamorphic rocks are also discussed.

Mathematics of the Arts for Teachers

Program Code: 6058P
Teachers 6-12

MON	**Jan. 6**	**10:00am - 10:50am**	**1/6**
TUE	**Jan. 7**	**10:00am - 10:50am**	**2/6**
WED	**Jan. 8**	**10:00am - 10:50am**	**3/6**
THR	**Jan. 9**	**10:00am - 10:50am**	**4/6**
FRI	**Jan. 10**	**10:00am - 10:50am**	**5/6**
MON	**Jan. 13**	**10:00am - 10:50am**	**6/6**

Participants are welcomed to an integrated study of mathematics and the arts. The arts of music, quilting, and painting are explored for their mathematical principles in this six-session program. The series highlights hands-on approaches to each of the three art forms.

A wonderful introduction to this year's series, *Mathematics of the Arts: Quilting* (see pages 28-29).

Mathematics of the Arts for Students

Program Code: 6068P
Students 6-8

FRI	**Feb. 28**	**1:00pm - 1:50pm**	**1/1**

Integrating hands-on math skills and conceptual art strategies and thinking, the *Infinite Stars and Patterns* program involves folding and cutting circles to make six- and eight-pointed stars out of paper and other materials. Finished stars can be used in a variety of class projects. Once your students become part of the Infinite Star Factory, they'll discover stars everywhere, including in the art of different cultures and in the patterns of everyday life.

Take Off! Part I

NASA Project
Program Code: 6090P
Students 6-8 and Teachers 6-12

MON	**Jan. 6**	**1:00pm - 1:50pm**	**1/7**
TUE	**Jan. 7**	**1:00pm - 1:50pm**	**2/7**
WED	**Jan. 8**	**1:00pm - 1:50pm**	**3/7**
THR	**Jan. 9**	**1:00pm - 1:50pm**	**4/7**
FRI	**Jan. 10**	**1:00pm - 1:50pm**	**5/7**
MON	**Jan. 13**	**1:00pm - 1:50pm**	**6/7**
WED	**Jan. 15**	**1:00pm - 1:50pm**	**7/7**

Explore the exhilarating world of flight. Get students interested in math and science through work in aviation. Student broadcasts cover aviation science, history and aviation careers presented through studio demonstrations, interviews, explanations by the presenters, animated illustrations, as well as footage of aircraft, aviation history, weather, and airport activities.

Mystery Writers

Program Code: 97003P
Students and Teachers 4-6

MON	**Mar. 3**	**2:00pm - 2:50pm**	**1/7**
MON	**Mar. 10**	**2:00pm - 2:50pm**	**2/7**
MON	**Mar. 17**	**2:00pm - 2:50pm**	**3/7**
MON	**Mar. 24**	**2:00pm - 2:50pm**	**4/7**
MON	**Mar. 31**	**2:00pm - 2:50pm**	**5/7**
MON	**Apr. 7**	**2:00pm - 2:50pm**	**6/7**
MON	**Apr. 14**	**2:00pm - 2:50pm**	**7/7**

The Mystery Writers have returned for their sixth season. Through discussions with visitors to the bookstore, their own reading, observations, and writings, and the introduction to key elements of mysteries, students will come to understand the design of mysteries. This introduction to the key elements of the mystery genre will help students develop and strengthen their writing skills. Bring your imagination and sense of humor, and be ready to have a good time learning!

Topics include:

- What is a mystery?
- How to begin
- Key characters
- What happened—the plot
- Details, details, details—writing more specifically
- The end results

This series is designed with additional suggestions and materials so that teachers can continue the process between sessions. These include classroom activities, practices, and strategies. The teacher session will be devoted to whole language, process writing, and tips on how to integrate *Mystery Writers* into your curriculum.

Sometimes You Don't Know What To Say

Program Code: 97009
Students 6-8

WED	**Jan. 8**	**11:00am - 11:50am**	**1/1**
FRI	**Jan. 17**	**12:00pm - 12:50pm**	**1/1**
WED	**Jan. 29**	**11:00am - 11:50am**	**1/1**

What does a student say to a classmate who returns to class after receiving chemotherapy? How would you behave? The goal of this program is to address difficult issues and concerns, to alleviate confusion, and to provide everyone with knowledge of what it is like to undergo treatment for cancer.

Video footage from the clinics and a group discussion will provide further knowledge of what it is like to undergo treatment for cancer. The group discussion will encompass all aspects of the issue, including the initial feelings when told of a diagnosis, the child's transition back to school, and what it is like to face peers and teachers. The kids will speak about their own experiences, both positive and negative, regarding their re-entry to school and their lives. This program was featured on *CBS This Morning*.

EnviroNet: Bugs, Bats, and Coyotes

Program Code: 97027P
Students and Teachers 6-8

WED	**Feb. 26**	**11:00am - 11:50am**	**1/4**
WED	**Mar. 5**	**11:00am - 11:50am**	**2/4**
WED	**Mar. 12**	**11:00am - 11:50am**	**3/4**
WED	**Mar. 19**	**11:00am - 11:50am**	**4/4**

Explore the mysteries of bugs, bats, and coyotes in this four-part series that features both the Commonwealth Zoological Corporation of Massachusetts and EnviroNet, the Environmental Science Network located at Simmons College in Boston.

Session I: Staff Development
This broadcast focuses on setting up your classroom with EnviroNet so that students will be able to share data

and ideas with other students and scientists throughout the country, and possibly the world.

Session II: InsectWorld
This broadcast will feature curriculum developed by Arizona State University, Simmons College, the Franklin Zoo, and MCET, and will include exciting video clips and some unusual live specimens.

Session III: BatNet
This broadcast features the bat, a night-flying animal that has frightened people throughout time. Travel to a bat cave and learn how bats use echolocation to navigate through the dark of night, what they do during the day, how they benefit humans, and why they should be protected.

Session IV: CoyoteHowl
Guest scientists will share their collected information on this species and give tips on getting involved with monitoring local coyote packs. This program will showcase footage of live coyotes from the Commonwealth Zoological Corporation and feature the EnviroNet server.

Are You a Target?

Program Code: 97001
Students 6-12, teachers, health educators, counselors, and administrators

MON	**Jan. 6**	**3:00pm - 3:50pm**		**1/1**
THR	**Jan. 16**	**3:00pm - 3:50pm**		**1/1**
WED	**Jan. 29**	**1:00pm - 1:50pm**		**1/1**

This program is designed to help young people, parents, and educators learn how cigarette and tobacco advertising works. Experts will analyze tobacco ads to sort out images from facts. The program will also look at how some states, like Massachusetts, are turning the tables on the tobacco industry by running their own public health advertising campaigns.

Meteorology: Just Dew It!

Program Code: 97006P
Teachers 6-9

WED	**Mar. 26**	**12:00pm -12:50pm**		**1/9**
WED	**Apr. 2**	**12:00pm -12:50pm**		**2/9**
WED	**Apr. 9**	**12:00pm -12:50pm**		**3/9**
WED	**Apr. 16**	**12:00pm -12:50pm**		**4/9**
WED	**Apr. 30**	**12:00pm -12:50pm**		**5/9**
WED	**May 7**	**12:00pm -12:50pm**		**6/9**
WED	**May 14**	**12:00pm -12:50pm**		**7/9**
WED	**May 21**	**12:00pm -12:50pm**		**8/9**
WED	**May 28**	**12:00pm -12:50pm**		**9/9**

This series will present teaching methods that will allow students to develop the principles and concepts that drive our atmosphere. An understanding of temperature variation will show students why pressure can vary, why pressure differences will result in winds, and why change of state and humidity will result in condensation and precipitation. By understanding these principles, students should be able to read and interpret a simplified weather map.

Using Insects in the Classroom

Program Code: 97061P
Teachers PreK-6 and PreK-6 education majors

MON	**Jan. 6**	**2:00pm - 3:00pm**		**1/14**
TUE	**Jan. 7**	**2:00pm - 3:00pm**		**2/14**
WED	**Jan. 8**	**2:00pm - 3:00pm**		**3/14**
THR	**Jan. 9**	**2:00pm - 3:00pm**		**4/14**
FRI	**Jan. 10**	**2:00pm - 3:00pm**		**5/14**
MON	**Jan. 13**	**2:00pm - 3:00pm**		**6/14**
WED	**Jan. 15**	**2:00pm - 3:00pm**		**7/14**
THR	**Jan. 16**	**2:00pm - 3:00pm**		**8/14**
FRI	**Jan. 17**	**2:00pm - 3:00pm**		**9/14**
WED	**Jan. 22**	**2:00pm - 3:00pm**		**10/14**
THR	**Jan. 23**	**2:00pm - 3:00pm**		**11/14**
FRI	**Jan. 24**	**2:00pm - 3:00pm**		**12/14**
MON	**Jan. 27**	**2:00pm - 3:00pm**		**13/14**
WED	**Jan. 29**	**2:00pm - 3:00pm**		**14/14**

The University of Massachusetts, Amherst, and MCET offer this 14-session program providing participants with the opportunity to explore the wonderful world of insects and to learn how to create integrated lesson using science as the base subject. Become engaged in a hands-on, open-ended experience with live insects. This series was filmed at UMass VIP Studios.

Telecommunicate!: Creating a Classroom Home Page

Program Code: 97051P
Educators K-12

WED	**Feb. 5**	**2:00pm - 2:50pm**		**1/3**
THR	**Feb. 6**	**2:00pm - 2:50pm**		**2/3**
FRI	**Feb. 7**	**2:00pm - 2:50pm**		**3/3**

Marie Gannon will take the participant through a step-by-step procedure on how to build a web page. During the show, you will create your own home page on the web server so you can duplicate this experience with your students. Instructions will be given on how to import graphics, how to keep a site updated, and how to keep track of visitors to the website.

Children's Authors and Illustrators Rebroadcast Specials

By helping students to understand how authors and illustrators use compositional devices in their work, we can increase student's appreciation of their work, as well as assist students in their own development as composers. As artists and writers describe the process they go through in creating a story, they also model brainstorming, writing, editing, and rewriting as well as sketching, drawing, and painting for students.

Special Guest: Illustrator Yoshi

Program Code: 97011
Students grades 1-3

MON	**Jan. 27**	**10:00am -10:50am**	**1/1**
MON	**Feb. 10**	**10:00am -10:50am**	**1/1**
THR	**May 1**	**2:00pm - 2:50pm**	**1/1**
THR	**May 8**	**2:00pm - 2:50pm**	**1/1**
THR	**May 15**	**2:00pm - 2:50pm**	**1/1**
THR	**May 22**	**2:00pm - 2:50pm**	**1/1**
THR	**May 29**	**2:00pm - 2:50pm**	**1/1**

Yoshi was born in Japan and graduated from the Tokyo University of the Arts, where she specialized in design and textile dyeing. Her illustrations are a combination of painting and batik on silk, drawing on centuries old techniques and traditions of Asian textile decoration. During this session we will look at her artwork, and discuss why and how she combines Japanese influences in her beautiful batiks and watercolors, as well as her stories.

Yoshi is the illustrator of *A to Zen,* an alphabet book; UNICEF-Ezra Jack Keats Award Citation Book *Big Al,* the story of a big, but gentle, scary-looking fish who tries to make friends with smaller fish; *Magical Hands,* a story of four friends who wish for magic tools to do their work; *Skeleton Woman,* an Aleutian folktale; and the author/illustrator of *Butterfly Hunt,* the story of a young boy who decides after a difficult butterfly chase that it is more fun to carry home memories than a trophy; *1, 2, 3,* a puzzling, tongue-twisting cumulative counting tale of an innocent inchworm; and *Who's Hiding Here,* an interactive, rhyming text that explores animal camouflage.

Special Guest: Author Patricia Lowery Collins

Program Code: 97010
Students grades 2-3

FRI	**Jan. 31**	**12:00pm -12:50pm**	**1/1**
WED	**Apr. 16**	**10:00am -10:50am**	**1/1**
MON	**May 5**	**3:00pm - 3:50pm**	**1/1**
FRI	**May 16**	**11:00am -11:50am**	**1/1**

Patricia Lowery Collins will begin the session by discussing her books and what it's like to have a career as an artist and writer. Following up with an "instant poetry" workshop for students, she will stress the importance of the creative process, and using one's own environment to find inspiration, and finding poems in different and unusual places. Join us as we have fun playing with words, and enjoy the power of poetic language!

Pat is a poet, painter, author, and illustrator. Her latest books include *Tomorrow, Up, and Away; Taking Care of Tucker; My Friend Andrew; Waiting for Baby Joe; Don't Tease the Guppies;* and *I Am An Artist,* a Reading Rainbow selection. She has most recently illustrated *Dreams of Glory,* an anthology of poems starring girls selected by Isabel Glaser.

Special Guest: Author Amy Hest

Program Code: 97045
Students grades 3-5

FRI	**Feb. 7**	**12:00pm -12:50pm**	**1/1**
WED	**Mar. 12**	**1:00pm - 1:50pm**	**1/1**
FRI	**Apr. 4**	**1:00pm - 1:50pm**	**1/1**
FRI	**May 23**	**11:00am -11:50am**	**1/1**

Known for her sensitive portrayals of the quiet moments in relationships between children and grandparents, writer Amy Hest will share with students where she finds ideas for her characters and stories. In this session she will discusses how she develops her ideas, as well as the many ways that different people help her along the way to a published book.

Amy Hest is the recipient of a 1996 Boston Globe-Horn Book Award, and author of over 20 books for children.

Ms. Hest's books include *The Purple Coat,* in which Gabby begs her tailor grandfather to make her a beautiful purple fall coat—despite her mother's reminder that "navy blue is what you always get." Her most recent book is *Jamaica Louise James*; on her eighth birthday, Jamaica receives paints which she uses to surprise her grandmother and to brighten the subway station where her Grammy works.

Ms. Hest has also written the award-winning escapades of Baby Duck and her grandfather in *In the Rain with Baby Duck, Baby Duck and the Bad Eyeglasses,* and *You're the Boss, Baby Duck.*

Other books include *Love You, Soldier* in which Katie, a Jewish girl living in New York City during World War II, sees many dynamic changes in her world as she ages from seven to ten, waiting for her father to return from the war. The sequel to this powerful short novel is *The Private Notebook of Katie Roberts, Age 11.* In a series of journal entries and letters to a pen pal, Katie relates her feelings about her father's death in World War II, her mother's remarriage, and the family's move from New York City to Texas.

Special Guests: Authors Carolyn Coman and Jacqueline Woodson

Program Code: 97046
Students grades 6-8

MON	**Feb. 10**	**1:00pm - 1:50pm**	**1/1**
THR	**Mar. 6**	**2:00pm - 2:50pm**	**1/1**
FRI	**Apr. 18**	**3:00pm - 3:50pm**	**1/1**
MON	**May 19**	**1:00pm - 1:50pm**	**1/1**

Through an interview with award-winning authors Carolyn Coman and Jacqueline Woodson, teachers and students will have the opportunity to explore realistic fiction, a popular genre among young adult readers.

We will discuss Coman's Newbury Honor Book *What Jamie Saw,* in which nine-year-old Jamie and his family flee to a family friend's trailer in New Hampshire after his stepfather tries to throw his baby sister against a wall. We will also discuss Woodson's Coretta Scott King Author Honor Book *I Hadn't Meant to Tell You This* in which Marie, who lives in the rich African American part of town, is the only girl in the eighth grade willing to be friends with poor, white, Lena, who lives on the wrong side of town; Marie finds out that her friend is being abused at home.

The two authors will discuss why they decided to write these particular stories, comparing and contrasting the different styles, strategies, and voices that they use in bringing their characters to life. Join us as we look at the different ways that Coman and Woodson help the reader to think about issues of family, friendships, and secrets.

Host Maeve Visser Knoth interviews authors Jacqueline Woodson and Carolyn Coman.

Carolyn Coman lives in Newburyport, MA. In addition to writing the 1996 Newbury Award Honor Book *What Jamie Saw,* she has also written *Tell Me Everything.* In this novel, the mother of twelve-year-old Roz dies in a rescue mission on a snowy mountain; Roz wonders if talking to God, and to the boy for whom her mother died, can help her understand what happened.

Jacqueline Woodson is the author of the 1996 Coretta Scott King Author Honor Book, *From the Notebooks of Melanin Sun.* In this novel, fourteen-year-old Melanin Sun tells us, through his diary, how his life has changed the summer his mother reveals that she has fallen in love with a woman. She has also written *Last Summer With Maizon, Maizon at Blue Hill,* and *Between Madison and Palmetto* (a trilogy of stories about Maizon's relationship with her friends) and *The Dear One,* in which twelve-year-old Femi is furious when her mother agrees to take in the pregnant daughter of an old friend who doesn't have the resources to support her. She has recently edited *A Way Out of No Way,* a collection of stories and poems about coming of age written by African American authors.

Stay Informed, Stay Tuned...

MCET is pleased to announce a variety of special educational programs and initiatives:

- Massachusetts Department of Education Board Meetings. See page 10 for the schedule.
- Teacher of the Year Activities
- NetDay Activities on October 26, 1996 and April 5,1997
- Team Harmony Event III, 1996: A day to celebrate a respect for differences
- and more!

Where to look for other broadcast dates and times:

- MCET's home page: http://www.mcet.edu
- Mailings from MCET
- On MCET before each program
- In curriculum packages
- From MCET Network Liaisons in your school district

Registration

Registration is not required for rebroadcast programs. However, programs with a code ending in "P" are PDP programs. If you wish to receive PDPs, you must register for the program. MCET will send an assessment form which must be returned no later than June 1, 1997 in order to receive PDPs. (Refer to page 63.)

Materials Information

As these programs are rebroadcast from previous seasons, there remains a very limited amount of print materials available. Non-print materials are not available. If you desire materials, please follow the registration steps on page 63. Materials will be distributed as requested until exhausted.

AN INVITATION FROM MCET...

Welcome to the Mass LearnPike and the Mass Ed Online LearnNet

Program Code: 97000

Meet teachers and professionals who are veteran travelers on the Mass LearnPike and LearnNet.

Audience

Educators (all levels)

Course Content

Teachers and other professionals will demonstrate the many byways of the Mass LearnPike, as well as how to incorporate Mass LearnPike programs into classroom instruction. In addition to learning about the many services offered by MCET, viewers will see and hear teachers' experiences in generating enthusiasm for technology and distance learning.

Sessions

TUE	Jan. 7	3:00pm - 3:20pm	1/1
THR	Jan. 9	3:00pm - 3:20pm	1/1
FRI	Jan. 10	12:00pm - 12:20pm	1/1
WED	Jan. 15	12:00pm - 12:20pm	1/1
THR	Jan. 16	1:00pm - 1:20pm	1/1
FRI	Jan. 17	11:00am - 11:20am	1/1
WED	Jan. 22	1:00pm - 1:20pm	1/1
THR	Jan. 23	3:00pm - 3:20pm	1/1
FRI	Jan. 24	12:00pm - 12:20pm	1/1

Registration Deadline

Registration is not necessary for this program.

K-5

Science and Technology

Social Studies

Winter Into Spring: Seasons on Drumlin Farm

Program Code: 97042

During the spring thaw, students will investigate changes and look for signs of emerging life on Drumlin Farm, a Massachusetts Audubon Society wildlife sanctuary.

Audience

Grades 1-3

Presenters

Susan Rauchwerk and other scientists from Drumlin Farm

Curriculum Frameworks Alignment

Science and Technology

Strands
- Domains of science: life science
- Inquiry

Standards
- Characteristics of organisms
- Diversity and adaptation of organisms
- Organisms and environments

Social Studies

Strands
- The world in spatial terms
- Physical earth

Standards
- Location and time
- People, places, and environments
- Physical systems of the earth

Course Content

Focusing on life under the sugar maple tree, this program will take students on an investigative journey through Drumlin Farm. The broadcast will encourage viewer participants to be extra-observant while searching through the spring thaw, encouraging students to examine bark scrapings, scat, pellets, and animal tracks. Students will also witness two special events that happen every spring on Drumlin Farm, the birthing of lambs and the collection of syrup from sugar maple trees.

Viewer participants will explore the behavior of the animals at Drumlin Farm while playing "picture jeopardy." Students will try to match clues such as piglet squeals, raccoon tracks, a cow's iris, or a close up picture of an owl's beak to a list of animal pictures and give their answers over the audio-bridge. When students identify the animal, we will travel to that animal's habitat at Drumlin Farm and observe its behavior as it leaves winter behind.

Materials

Participating sites will receive: owl pellets, an animal tracking kit, a classroom version of "picture jeopardy," a tape of farm sounds, and a written packet filled with classroom activities.

Live Session

THR	Mar. 20	10:00am - 10:50am	1/1

Rebroadcast Sessions

FRI	Mar. 21	2:00pm - 2:50pm	1/1
WED	Mar. 26	11:00am - 11:50am	1/1
MON	Jun. 2	2:00pm - 2:50pm	1/1

Registration Deadline

February 7

Mass Performance: Odaiko New England

K-5

The Arts

Program Code: 97012

In celebration of Asian Pacific American Heritage Month (May 1997) MCET presents Odaiko New England. The powerful sound of the taiko, combined with dynamic movement creates an exuberant and energetic performance that is sure to broaden audiences' perspectives of Asian American art and culture.

Audience

Grades K-2

Presenters

Elaine Fong and Odaiko New England

Curriculum Frameworks Alignment

The Arts

Strands

- Understand the arts as a means of expression
- Observe skills and strategies unique to an art form
- Investigate the cultural and historical contexts of the arts

Standards

- Observe, discuss, interpret the artistic work of others
- Describe some ways that people are involved in the arts within a community

Course Content

Propulsive. Pounding rhythms. Dynamic movement. Energy and free-wheeling spirit. These are but a few descriptions of taiko.

What's taiko? Taiko is the Japanese word for drum, and is deeply rooted in the daily life and culture of Japan. Taiko is part of the Japanese Shinto and Buddhist traditions, taiko is part of Japanese mythology. Taiko is used during rice planting season. Taiko was even used to inspire Samurai warriors in battle. It has also been said that the boundaries of villages were marked by how far you could hear the taiko. It's sound has been associated with the cycles of nature, the changing of the seasons, and the celebration of life. You can hear the sounds of taiko at every Japanese festival.

Taiko in the United States began 25 years ago; Odaiko New England (ONE) can be considered the "next" generation of newly developed taiko groups founded by individuals interested in exploring the exciting possibilities of this art form. ONE combines the traditional aspects of taiko with other musical elements such as jazz, rock, Latin and African rhythms into an exciting and distinctly American taiko sound. Performances require incredible physical strength, and integrate elements of dance as well.

Photo by Karen S. Young

Mass Performance: Odaiko New England (continued)

"The drums that we play are big," says ONE member Elaine Fong. "When you listen, your body resonates. The sounds go right to your marrow." Fong is a founding member of Odaiko New England and not only knows the traditions and histories of this ancient drumming style, but, with her group, has built some of the instruments out of wooden wine casks and cowhide.

During this broadcast, young students will be exposed to the varied sounds of taiko. Our guests will also discuss the relationship between taiko in Japan and taiko in America, as well as describe how they prepare and rehearse for a performance. A striking example of the rich, exciting and multifaceted contributions the Asian community brings to Boston, ONE members come from ethnically and culturally diverse backgrounds. Join us for an exciting and energizing morning!

Materials

MCET will provide background information on Japanese and Japanese American taiko groups and cross-cultural explorations, a bibliography of primary level books, videos and audiotapes about Japan and Japanese Americans, and suggestions for activities that will help your students prepare for the show. Resources for developing programs and projects to celebrate Asian Pacific American Heritage Month will also be available.

Faculty

Elaine Fong is a founding member and artistic director of Odaiko New England. She has over thirteen years of taiko performance, teaching and administrative experience. Odaiko New England (ONE) was founded in 1994 and is the only taiko group in Massachusetts. They have performed at the 1996/7 First Night Boston, Brookline's Asian American Heritage Celebration, Governor Weld's New American Appreciation Awards, the Cambridge Multicultural Arts Center, and at the Boston Children's Museum.

Live Session

THR	May 8	10:00am - 10:30am	1/1

Rebroadcast Sessions

FRI	May 9	3:00pm - 3:30pm	1/1
WED	May 14	11:00am - 11:30am	1/1
WED	Jun. 4	12:00pm - 12:30pm	1/1
WED	Jun. 11	2:00pm - 2:30pm	1/1

Registration Deadline

April 25

K-5

The Arts

New England Aquarium's World of Water: Ocean Detective Kit

K-5

Science and Technology

Social Studies

2.5 Professional Development Points

Program Codes: 97005P

Students will explore strange, beautiful and exciting aquatic life in this five part series

- *Session I: Rocky Coast—Tide Pools*
- *Session II: Islands—Penguins*
- *Session III: Sea of Green—Marine Mammals*
- *Session IV: Sea of Blue—Open Ocean*
- *Session V: Sea of Darkness—Deep Sea*

Audience

Grades K-2

Presenter

Lisa Fredrickson
Paul Erickson, guest presenter

Curriculum Frameworks Alignment

Science and Technology

Strands
- Life Science
- Earth and Space Science

Standards
- Classification of organisms
- Diversity and adaptation of organisms
- Ecosystems and organisms
- Characteristics of organisms
- Interactions and cycles in the earth system

Social Studies

Strands
- Physical earth

Standards
- People, places and environments
- Physical systems of the earth
- Components and destruction of ecosystems

Course Content

Students will explore the mysteries of the sea with live animals on the set, breathtaking videos, puzzles, and classroom activities. Each program will demonstrate a small-hands-on activity to share in the class and provide a chance for your students to be on the air. Scientists and educators will guide viewer participants through a five part-series that covers:

Rocky Coast—Tide Pools:
Find out why sea stars are also known as the walking stomachs of the tide pool. Tide pools feature some of Earth's most rugged creatures, which are forced to adapt to periods of desiccation and submergence. These include animals that can regenerate limbs, use their foot for suction, and mimicry to ambush prey. This program will feature the behavioral habits of sea urchins, rock crabs, periwinkles, and more.

Islands—Penguins:
The loud trumpet-like sound of the rock hopper penguin will signal the beginning of this island hopping journey as we explore the unique habitats of ocean islands. Viewer participants will be able to compare black footed penguins with rock hopper penguins, both island dwellers and products of biological isolation. Black foot penguins will be live on the set.

New England Aquarium's World of Water: Ocean Detective Kit (continued)

K-5

Science and Technology

Social Studies

Sea of Green—Marine Mammals:
From playful sea otters to gigantic whales, marine mammals are some of the most fascinating and intelligent animals on earth. Join us on a New England whale watch, where we will witness graceful giant humpback whales entertain a group of young scientists. Back at the studio we will meet "Lucky," the 42-foot inflatable white whale.

Sea of Blue—Open Ocean:
Like a hang glider, flying fish of the open ocean glide through the air using their fins as wings. Leaving the coast behind, viewer participants will explore the open ocean where they will encounter whale sharks and Portuguese Man O'War. Live on the set will be some of the drifters of the sea, jellies, and giant frisbee-like mola mola.

Sea of Darkness—Deep Sea:
We begin our descent to the sea of darkness where we will come across swimming sea cucumbers, sea spiders three feet across, the fearsome dragon viper fish, and deep sea tube worms over five feet tall. We will visit hydrothermal vent communities where creatures survive in water over 400 degrees Fahrenheit and pressures so great that they can crush the hulls of nuclear submarines.

Faculty

Lisa Fredrickson, Supervisor of Outreach Education at the New England Aquarium, is a marine biologist and educator. Lisa has appeared on previous MCET programs such as *Coastlines, Wet and Wildlife, Coastal Magic,* and *High Seas.*

Scuba diver, biologist, and photographer Paul Erickson is a veteran New England Aquarium staff member who has reported for ABC-TV's *Good Morning, America* and WBZ-TV news.

Live Sessions

THR	Jan. 30	10:00am - 10:30am	1/5
THR	Feb. 13	10:00am - 10:30am	2/5
THR	Apr. 10	10:00am - 10:30am	3/5
THR	May 1	10:00am - 10:30am	4/5
THR	May 15	10:00am - 10:30am	5/5

Rebroadcast Sessions

FRI	Jan. 31	3:00pm - 3:30pm	1/5
WED	Feb. 5	10:00am - 10:30am	1/5
FRI	Feb. 14	1:00pm - 1:30pm	2/5
THR	Feb. 27	10:00am - 10:30am	2/5
FRI	Apr. 11	1:00pm - 1:30pm	3/5
WED	Apr. 16	11:00am - 11:30am	3/5
MON	May 5	2:00pm - 2:30pm	4/5
WED	May 7	10:00am - 10:30am	4/5
FRI	May 16	1:00pm - 1:30pm	5/5
WED	May 21	11:00am - 11:30am	5/5

For your convenience, each session of this program will be rebroadcast in June:

MON	Jun. 16	11:00am - 11:30am	1/5
TUE	Jun. 17	11:00am - 11:30am	2/5
WED	Jun. 18	11:00am - 11:30am	3/5
THU	Jun. 19	11:00am - 11:30am	4/5
FRI	Jun. 20	11:00am - 11:30am	5/5

Registration Deadline

January 10

Partially funded by the Massachusetts Board of Higher Education and the Dwight D. Eisenhower Professional Development Program.

New England Aquarium's World of Water

K-5

Science and Technology

Social Studies

8.1 Professional Development Points

Program Codes: 97007P

The focus of this series is the strange, beautiful, and exciting aquatic life from inland freshwaters to the deep ocean.

Audience

Teachers and students, grades 3-6

Presenters

Lisa Fredrickson
Paul Erickson, guest presenter

Curriculum Frameworks Alignment

Science and Technology

Strands
- Life Science
- Earth and Space Science

Standards
- Classification of organisms
- Diversity and adaptation of organisms
- Ecosystems and organisms
- Characteristics of organisms
- Interactions and cycles in the earth system

Social Studies

Strands
- People and Environments

Standards
- Students will use the concept of space to analyze people and environments
- Students will identify and analyze the physical characteristics of the earth in geographical terms, and organize them into functional units called ecosystems

Course Content

The series features live animals on the set, breathtaking videos, scientists, puzzles, classroom activities, and a chance for your students to be on the air. Scientists will guide students in exploring freshwater bogs, marshes, ponds, carnivorous plants, and endangered species. The coastline sessions will investigate rocky shores, sandy beaches, estuaries, and coral reefs. The last four broadcasts will plunge into the deep sea to explore some of our planet's greatest mysteries, from the lives of great whales and whale sharks to the cold light generated by bizarre bottom dwellers.

The series also features two live, interactive teacher workshops broadcast from the new New England Aquarium (NEA) Education Center. Discover classroom activities that you can try with your students, ask questions, and take part in valuable feedback sessions with presenter Lisa Fredrickson, the NEA Supervisor of Outreach Education.

Faculty

Lisa Fredrickson, Supervisor of Outreach Education at the New England Aquarium, is a marine biologist and educator. Lisa has appeared on previous MCET programs such as *Coastlines, Wet and Wildlife, Coastal Magic,* and *High Seas.*

Scuba diver, biologist, and photographer Paul Erickson is a veteran New England Aquarium staff member who has reported for ABC-TV's *Good Morning, America* and WBZ-TV news.

New England Aquarium's World of Water (continued)

K-5

Science and Technology

Social Studies

8.1 Professional Development Points

Live Sessions

THR	Jan. 30	3:00pm - 3:50pm	7/15	(Teacher Session)
THR	Feb. 13	1:00pm - 1:30pm	8/15	
THR	Feb. 27	1:00pm - 1:30pm	9/15	
THR	Mar. 13	1:00pm - 1:30pm	10/15	
THR	Mar. 27	1:00pm - 1:30pm	11/15	
THR	Apr. 10	1:00pm - 1:30pm	12/15	
THR	May 1	1:00pm - 1:30pm	13/15	
THR	May 15	1:00pm - 1:30pm	14/15	
THR	May 29	1:00pm - 1:30pm	15/15	

Rebroadcast Sessions

MON	Feb. 3	10:00am - 10:50am	7/15	(Teacher Session)
FRI	Feb. 7	1:00pm - 1:50pm	7/15	(Teacher Session)
FRI	Feb. 14	11:00am - 11:30am	8/15	
WED	Feb. 26	2:00pm - 2:30pm	8/15	
WED	Mar. 5	2:00pm - 2:30pm	9/15	
THR	Mar. 6	3:00pm - 3:30pm	9/15	
MON	Mar. 17	3:00pm - 3:30pm	10/15	
WED	Mar. 19	10:00pm - 10:30am	10/15	
WED	Apr. 2	11:00am - 11:30am	11/15	
FRI	Apr. 4	2:00pm - 2:30pm	11/15	
FRI	Apr. 11	2:00pm - 2:30pm	12/15	
THR	Apr. 17	10:00am - 10:30am	12/15	
FRI	May 2	2:00pm - 2:30pm	13/15	
WED	May 7	11:00am - 11:30am	13/15	
MON	May 19	10:00am - 10:30am	14/15	
THR	May 22	3:00pm - 3:30pm	14/15	
FRI	May 30	11:00am - 11:30am	15/15	
WED	Jun. 4	2:00pm - 2:30pm	15/15	

For your convenience, each session of this program will be rebroadcast in June:

MON	Jun. 2	10:00am - 10:50am	1/15	(Teacher Session)
TUE	Jun. 3	10:00am - 10:30am	2/15	
WED	Jun. 4	10:00am - 10:30am	3/15	
THR	Jun. 5	10:00am - 10:30am	4/15	
FRI	Jun. 6	10:00am - 10:30am	5/15	
MON	Jun. 9	10:00am - 10:30am	6/15	
TUE	Jun. 10	10:00am - 10:50am	7/15	(Teacher Session)
WED	Jun. 11	10:00am - 10:30am	8/15	
THR	Jun. 12	10:00am - 10:30am	9/15	
FRI	Jun. 13	10:00am - 10:30am	10/15	
MON	Jun. 16	10:00am - 10:30am	11/15	
TUE	Jun. 17	10:00am - 10:30am	12/15	
WED	Jun. 18	10:00am - 10:30am	13/15	
THR	Jun. 19	10:00am - 10:30am	14/15	
FRI	Jun. 20	10:00am - 10:30am	15/15	

Fall Rebroadcast Sessions in January

A special rebroadcast of the fall sessions will be shown on the following dates (we recommend that you tape these programs for future use):

WED	Jan. 15	10:00am - 10:50am	1/15	(Teacher Session)
THR	Jan. 16	10:00am - 10:30am	2/15	
FRI	Jan. 17	10:00am - 10:30am	3/15	
WED	Jan. 22	10:00am - 10:30am	4/15	
THR	Jan. 23	10:00am - 10:30am	5/15	
FRI	Jan. 24	10:00am - 10:30am	6/15	

Registration Deadline

January 10

Please note: If you registered for this program last fall, it is not necessary to register again. If you did not register, please do so. Upon registration you will be sent materials from the previous sessions. If you are earning PDPs, you need to view the entire series and return the evaluation form to MCET.

This professional development initiative is partially supported by a grant from the Millipore Corporation Foundation.

Partially funded by the Massachusetts Board of Higher Education and the Dwight D. Eisenhower Professional Development Program.

New England Aquarium

6-8 Passport to Knowledge—Live From Antarctica II

Science

Program Codes: 97048

Passport to Knowledge electronic field trip offers a fully-integrated combination of:

- *Live, interactive, one-hour television specials*
- *A user-friendly Teacher's Guide*
- *On-line, freely accessible resources on the Internet*

Live From Antarctica II *will return to the icy continent after the 1994-95 expedition. Passport will use NASA's ACTS satellite to link Palmer Peninsula and the outside world for the first time by live video. It will also be live, at sea, from a Coast Guard ice breaker, the Research Vessel (R.V.) Polar Duke, observing ongoing marine science in real time.*

In addition to marine biology, Palmer is a center for long-term ecological research, and this program will also provide the latest information on issues of global change, on the stability of Antarctica ice-shelves and ice-sheets, and the ozone hole. The tape crew will be on location sufficiently ahead of time to create the same kind of highly visual stories which enlivened Live From Antarctica I. *This visit will focus more intensely on marine biology and the fascinating interaction of ocean, ice, seals and penguins.*

Audience

Students grades 6-8, teachers, educators.

Curriculum Frameworks Alignment

Science and Technology

Strands
- Life Science
- Earth and Space Science

Standards
- Diversity and adaptation of organisms
- Characteristics of organisms
- Interaction and cycles in the earth environment

Course Content

Session I: "Oceans, Ice and Life"
Life on board the *R.V. Polar Duke*... and life in the icy oceans. Live from the *R.V. Polar Duke* at sea, close to Palmer Station. What it takes to prepare for a productive research trip; how researchers get to Antarctica via Punta Arenas, Chile, and a passage over the stormiest waters on Earth. A close-up look at how researchers study krill and other creatures close to the bottom of the food chain, and how global climate affects all the creatures who live here—from plankton to whales.

Session II: "Birds Down Below"
Live from a penguin rookery close to Palmer Station. A close-up view of the first weeks of life of a new generation of Adelie penguins, and insights on what makes some thrive, and some not survive. Other islands will be reached by *Zodiac*—a small inflatable boat which is the primary transportation for the researchers—to study the skuas which prey on unhatched penguin eggs. A portrait of Palmer Station, a 40-person research outpost viewing the sights and listening to the sounds that face the dedicated researchers who come here year after year.

Session III: "Earth's Cold Canary"
If Earth were a coal mine, Antarctica would be its canary: how biological and climate studies reveal long-term changes in Earth's environment. Palmer Peninsula is the only place in Antarctica where organisms larger than lichens can exist on land. We see how scientists use tiny greenhouses to study how plant growth relates to changes in Earth's atmosphere, temperature and amount of ultraviolet radiation. We also look at elephant seals and giant whales. This final program shows how research in the Palmer Peninsula, on land and at sea, this season and over many seasons past and to come, provides a unique gauge by which to measure what's happening to Antarctica, and to our planet.

Passport to Knowledge—Live From Antarctica II

6-8

Science

Accessing Material

On-line resources over the Internet, including text-based e-mail as well as using graphic capabilities on the World Wide Web can be accessed at: http://quest.arc.nasa.gov/antarctica/index.html

Teacher's Guide: A user-friendly guide suggesting hands-on activities, ways to adapt materials targeted at middle school science to elementary and high school grades, and interdisciplinary extensions to mathematics, social studies and language classes. To obtain copies of the Teacher's Guides, contact: Passport to Knowledge, P.O. Box 1502, Summit, NJ 07902-1502.

MCET will NOT be mailing out this guide.

Credits:

Live from Antarctica II is a Passport to Knowledge Production. It is supported in part by NASA, National Science Foundation, PBS K-12 Learning Services and public television.

Live Sessions:

THR	Jan. 23	1:00pm - 2:00pm	1/3
THR	Jan. 30	1:00pm - 2:00pm	2/3
THR	Feb. 6	1:00pm - 2:00pm	3/3

Registration Deadline

January 10

Mass Performance: Odaiko New England

Program Code: 97013

6-8

The Arts

In celebration of Asian Pacific American Heritage Month (May 1997) MCET presents Odaiko New England. The powerful sound of the taiko, combined with dynamic movement creates an exuberant and energetic performance that is sure to broaden audiences' perspectives of Asian American art and culture.

Audience

Grades 6-8

Presenters

Elaine Fong and Odaiko New England

Curriculum Frameworks Alignment

The Arts

Strands

- Understand the arts as a means of expression
- Observe skills and strategies unique to an art form
- Investigate the cultural and historical contexts of the arts

Standards

- Observe, discuss, interpret the artistic work of others
- Understand that works of art have a general cultural style that reflects values, beliefs, particular ways of perceiving the world, and varying levels of resources
- Help students distinguish among art forms of major cultural areas of the world, and in different periods in time
- Describe the ways that people are involved in the arts within a community

© Dennistein Photography

Course Content

Propulsive. Pounding rhythms. Dynamic movement. Energy and free-wheeling spirit. These are but a few descriptions of taiko.

What's taiko? Taiko is the Japanese word for drum, and is deeply rooted in the daily life and culture of Japan. Taiko is part of the Japanese Shinto and Buddhist traditions, taiko is part of Japanese mythology, taiko is used during rice planting season. Taiko was even used to inspire Samurai warriors in battle. It has also been said that the boundaries of villages were marked by how far you could hear the taiko. It's sound has been associated with the cycles of nature, the changing of the seasons, and the celebration of life. You can hear the sounds of taiko at every Japanese festival.

Taiko in the United States began 25 years ago, as young third generation Japanese Americans, sansei, looked for ways to create Asian American culture that was by, for, and about themselves. They looked for inspiration to one of the most ancient instruments, the taiko, for its symbolic and spiritual possibilities. Since that time, over 80 taiko groups have formed.

Odaiko New England (ONE) can be considered the "next" generation of newly developed taiko groups founded by individuals interested in exploring the exciting possibilities of this art form. The only taiko group in Massachusetts, ONE combines the traditional aspects of taiko with other musical elements such as jazz, rock, Latin and African rhythms into an exciting and distinctly American taiko sound. ONE members come from ethnically and culturally diverse backgrounds, reflecting the diversity of Massachusetts.

Mass Performance: Odaiko New England (continued)

During this broadcast, students will be exposed to the sounds of taiko, as well as learn about the relationships between an ancient art form and a contemporary performance group. ONE will discuss their development as a group and touch on issues of race, ethnicity and cross-cultural art forms. As a striking example of the rich, exciting and multifaceted contributions the Asian community brings to Boston, the broadcast will help teachers and students deepen their understanding of Japanese American cultures.

Materials:

MCET will provide background information on Japanese and Japanese American taiko, a bibliography of related books, videos and audiotapes, and suggestions for integrating this performance into a variety of curriculum units, including literature, science (sound) and social studies. Resources for developing programs and projects to celebrate Asian Pacific American Heritage Month will also be available.

Faculty:

Elaine Fong is a founding member and artistic director of Odaiko New England. She has over thirteen years of taiko performance, teaching and administrative experience. Odaiko New England (ONE) was founded in 1994 and is the only taiko group in Massachusetts. They have performed at the 1996/7 First Night Boston, Brookline's Asian American Heritage Celebration, Governor Weld's New American Appreciation Awards, the Cambridge Multicultural Arts Center, and at the Boston Children's Museum.

Live Session

THR	May 8	1:00pm - 1:50pm	1/1

Rebroadcast Session

FRI	May 9	11:00am - 11:50am	1/1
MON	May 12	2:00pm - 2:50pm	1/1
FRI	Jun. 6	12:00pm - 12:50pm	1/1
THR	Jun. 12	2:00pm - 2:50pm	1/1

Registration Deadline

April 25

Photo by Karen S. Young

Mathematics of the Arts: Quilting

Program Code: 97015P

6-8

The Arts

Mathematics

PROFESSIONAL DEVELOPMENT 4.0 POINTS

Join us as we learn the art of patchwork quilting with artist Margit Echols. Along with launching the students on a journey of discovery into an exciting world of geometric design, these sessions will prepare students for a more formal study of Euclidean geometry. Students gain shape and pattern recognition, and a precise knowledge of the patterns in nature, technology and everyday life that artists have employed, often intuitively, throughout centuries. Plan to have your students work together to complete sample patchwork blocks.

Audience

Grades 6-8

Presenter

Margit Echols

Photo by Gavin Ashworth

Curriculum Frameworks Alignment

The Arts

Strands

- Use arts as a means of expression
- Understand technical demands of particular art forms
- Connections and parallels among various art disciplines

Standards

- Have an opportunity to broaden their interests in art and transforming personal experience into different art forms
- Gain expertise in making informed aesthetic responses
- Learn to discriminate between patterns of light and shadow, surface design, and reflection, and the interrelationship between these and other elements such as position, size and proportion.
- Gain deeper insight into the role that the quilting arts have played in the development of cultures throughout the world

Mathematics

Strands

- Patterns, relations, and functions
- Geometry

Standards

- Describe, analyze, extend and create patterns
- Represent relationships
- Model real-world phenomena with a variety of functions
- Explore perimeter, area, volume and angle measure
- Represent problem situations with geometric models and apply properties of figures
- Deduce properties of and relationships between figures

Course Content

"What is it that drives every quiltmaker to cut up yards of fabric just to put it back together again? How is it that we can bear all the time that it takes to make a quilt? Why, after making a quilt for everyone in the family are we driven to still make more? You can't convince me that it has anything to do with utility or recycling. Besides the obvious rewards of accomplishing technical challenges, of making colors sing, enjoying the tactile sensuality of textiles and the meditative quality of repetitive handwork, there is the excitement of problem solving, of putting the puzzle together, of winning the battle against chaos, which has deep intellectual appeal. This is what propels us cheerfully through all that work."

So says Margit Echols, patchwork artist and quilter. In this workshop series, you and your students will have the opportunity to explore the world of an artist, and have the chance to learn the art of quilting and patchwork design. In the process, you will put into practice the varied skills, strategies, and resources that a quilter uses in preparing to make a quilt, including mathematical, historical and aesthetic inspiration and concerns. As you explore the connections between mathematics and quilting, you will see that both disciplines provide frameworks in which patterns, symmetries and relationships are highlighted. In-class activities between sessions will involve mathematical problem solving as students begin to plan their quilt blocks.

Additionally, by conceptualizing, planning and actually sewing together a patchwork quilt, students will integrate a number of other subjects areas. They can research and reference a multitude of historical resources about the development of this textile art, or read some of the many picture books, short stories and novels that focus on the arts of quilting. Watch some of the wonderful new films about quilting, such as *How to Make an American Quilt*, or learn about the many quilt projects that

Math of the Arts: Quilting (continued)

Photo by Sarah Wells

Log Cabin Quilt from the collection of Margit Echols.

focus on social issues and concerns such as the At Risk Babies Crib Quilts (ABC) project that provides crib quilts to hospitalized babies, or the NAMES Project Quilt, devoted to memorializing the thousands of men, women and children who have died of AIDS.

Why use patchwork quilts with young adults in the classroom? Quiltmaking draws upon a unique way of constructing meaning, using both skills and strategies that are both technical and intuitive. It is interesting to many students who like to work collaboratively, yet is still interesting for students who prefer to work on their own. Your students will find quilting an opportunity to learn and understand that other subjects do not provide; even those that find learning difficult will find a place for themselves here, and want to apply the lessons learned here to other activities. Learning to handsew is an important skill to master, and scraps of fabric are easily found. Students can, and will, carry their work everywhere.

Quilting brings a sense of accomplishment to every student who picks up needle, thread, and a bundle of scraps, and ends with a reflection of their own unique creativity. Join us!

Teacher Session

The teacher session will help prepare teachers for the programs to follow. We will share ideas for building student knowledge and motivation, suggest activities that bridge to the art and mathematics content, and discuss a variety of collaborative quilt projects that students and teachers can participate in.

Student Sessions

During the four student sessions, we will explore quilting as an art form, using a variety of mathematical concepts. Our primary focus will be on the half-square patch, a simple patch using squares and triangles as all over patterns and how they can be used to create quilts. Each session will focus on quilting strategies and techniques, as well as look at historical and contemporary examples of the craft. Math, art and social studies teachers can use the activities to explore ideas in each discipline.

Materials

MCET will provide teachers with everything that they need to begin quilting with your students: a start-up kit of tools and templates, detailed instructions about patchwork and quilting, and a list of museums, volunteer organizations, and community groups devoted to quilting and social education. To help you integrate this program into your classroom, we will provide a curriculum guide with language arts, mathematics, social studies and visual art and media based activities, and a list of software programs that can support the quilting project. Included will be an annotated bibliography of books and videos for you and your students. In addition, a list of internet resources devoted to quilting can be found on the MCET quilting web page.

If you would like to talk to other teachers and educators about this project, send an email with the contents ***subscribe quilts*** *to* ***majordomo@meol.mass.edu.***

Faculty

Margit Echols, an artist, author, designer, nationally known quiltmaker and teacher has authored five books on quiltmaking. Her designs have been licensed by fabric and pattern companies and are found in national women's interest magazines such as *Country Living* and *Woman's Day*. She co-developed two programs for the Metropolitan Museum of Art, and co-authored the teacher packet, *Patterns East and West*. Her popular 1996 program for MCET, the Infinite Star Factory, first introduced teachers and students to the use of geometry in the arts and quiltmaking.

Live Sessions

WED	Mar. 5	3:00pm - 3:50pm (Teacher Session)	1/5
FRI	Mar. 21	10:00am - 10:50am	2/5
FRI	Apr. 4	10:00am - 10:50am	3/5
FRI	Apr. 11	10:00am - 10:50am	4/5
FRI	May 2	10:00am - 10:50am	5/5

Rebroadcast Sessions

FRI	Mar. 7	3:00pm - 3:50pm (Teacher Session)	1/5
MON	Mar. 10	10:00am - 10:50am (Teacher Session)	1/5
WED	Mar. 26	10:00am - 10:50am	2/5
THR	Apr. 3	2:00pm - 2:50pm	2/5
WED	Apr. 9	11:00am - 11:50am	3/5
FRI	Apr. 11	3:00pm - 3:50pm	3/5
WED	Apr. 16	1:00pm - 1:50pm	4/5
FRI	Apr. 18	10:00am - 10:50am	4/5
WED	May 7	1:00pm - 1:50pm	5/5
FRI	May 9	10:00am - 10:50am	5/5

For your convenience, each session of this program will be rebroadcast in June:

MON	Jun. 9	3:00pm - 3:50pm (Teacher Session)	1/5
TUE	Jun. 10	3:00pm - 3:50pm	2/5
WED	Jun. 11	3:00pm - 3:50pm	3/5
THR	Jun. 12	3:00pm - 3:50pm	4/5
FRI	Jun. 13	3:00pm - 3:50pm	5/5

Registration Deadline

February 7

6-8

The Arts

Mathematics

PROFESSIONAL DEVELOPMENT 4.0 POINTS

Life's A Breeze: the Art (and Science) of Kiting

4-6

The Arts

Program Code: 97002

Kiting and kite building brings an element of challenge and creativeness that both kids and adults enjoy. Elements of art, math, science, and the environment all come into play. When flying a kite, however, each of these individual concepts combine seamlessly into an all-encompassing experience that can simply be described as amazing. Join us this Spring for a Kite Workshop and experience the power and passion of playing with the wind!

Audience

Grades 4-6

Presenter

Archie Stewart

Course Content

No one knows what the first kites looked like, even though most historians believe that the first kites were flown in China over 3000 years ago. Found in every country and culture in the world, the word *kite* is an English word that refers to a bird of prey. In Spanish, *cometa* likens kites to falling stars, or comets, and the Chinese word for kite, *feng-cheng,* also means wind harp. Kites have been used for many purposes, from hunting, military and meteorological uses as well as to send religious, social and political messages into the sky. Today they are seen as a fun and fascinating toy, but also as the subject of serious aerodynamic research at the Kite Experimentation Laboratory at the Massachusetts Institute of Technology.

This Kite Workshop is a formal introduction to kiting and kite building. Kite history, the principles of flight, flight characteristics and kite bridles and their importance are all discussed. The connection between kiting and music will be explored, particularly in how it is applied to competitive flying, and the balletic aspect of kiting. How to design, fly a kite (outdoors **and** indoors), and fly a kite safely will also be discussed.

Used as tools for work and pleasure for centuries, how a kite flies is still being explored. Forces of lift, drag, and gravity all combine to keep a kite in the air, and kite building allows one to practice and apply mathematical skills and reasoning such as measurement, ratios, algebra and geometry. Flying kites also develops a sense of one's physical self and abilities. In this session you and your students will have the opportunity to explore these concepts—but it's the magic that we'll be focusing on!

Life's A Breeze: the Art (and Science) of Kiting (continued)

Curriculum Frameworks Alignment

The Arts

Strands

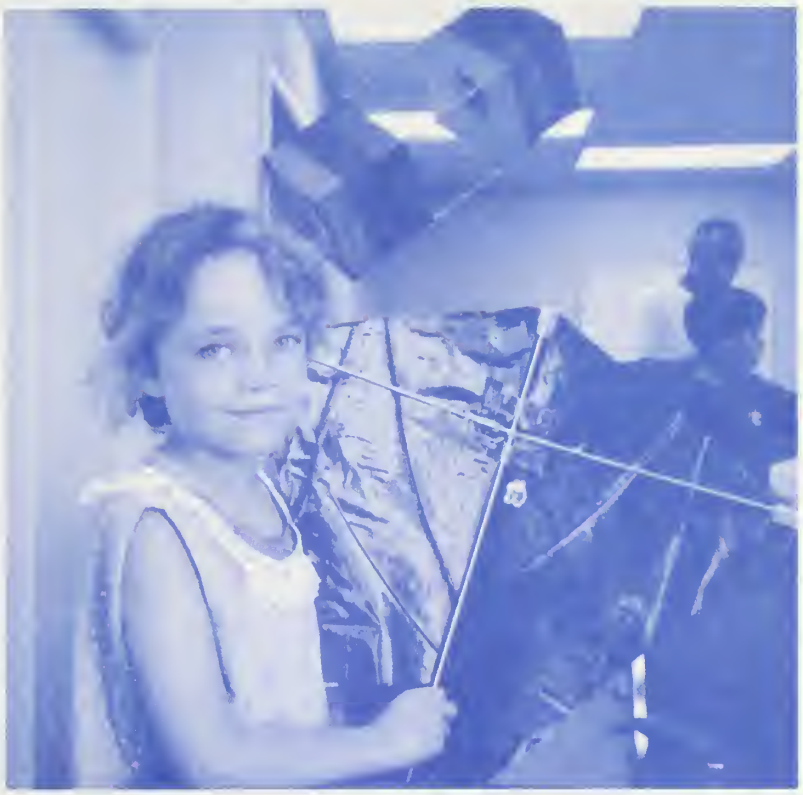
- Understand the arts as a means of expression
- Observe skills and strategies unique to an art form
- Investigate the cultural and historical contexts of the arts

Standards

- Observe, discuss, and interpret the artistic work of others
- Develop the skills and strategies necessary to creatively answer artistic questions
- Have an opportunity to broaden their interests in art and transform their personal experience into different art forms
- Understand the contributions of artists and their ways of communicating the values, beliefs, and knowledge of a people in historical and contemporary times
- Describe the ways that people are involved in the arts within a community
- Learn that multiple opportunities exist in the arts, and that an artist uses specific knowledge in their work

Materials:

MCET will provide materials for teachers that will prepare you and your students for this exciting session. This will include strategies and activities that introduce and explore the core concepts of wind—moving air—and flight, ideas for building student knowledge and motivation, a bibliography of fiction and non-fiction resources, and a list of inexpensive, easily found materials, templates and instructions on how to build a variety of kites with your students.



Faculty:

Archie Stewart is a designer and fabricator of kites. He has taken an interest in kiteflying since 1987 and has worked towards sharing his enthusiasm in kiting with everyone he encounters. A member of the American Kitefliers Association, and vice-president, board member, and Chairman of Festivals and Competitions for Kites Over New England, he has won numerous awards as a competitor in the Eastern League Flyers Association. With his flight partner John Ruggiero, he initiated the monthly "indoor fly" at Marblehead High School as a winter flying sport. This activity has proven to be a wonderful opportunity to bring the public closer to his passion for flight.

Live Session

THU	Mar. 6	10:00am - 10:50am	1/1

Rebroadcast Sessions

FRI	Mar. 7	10:00am - 10:50am	1/1
THU	Mar. 13	2:00pm - 2:50pm	1/1
WED	Jun. 11	12:00pm - 12:50pm	1/1
FRI	Jun. 13	2:00pm - 2:50pm	1/1

Registration Deadline

February 7

What's in a Song?

Program Code: 97018

Audience
Grades 4-6

Presenter
Corey Allen

4-6

The Arts

Curriculum Frameworks Alignment

The Arts

Standards
- Integrate design elements included in a composition including repetition, balance, and variation on a theme.
- Show basic understanding of sound production on acoustic and electronic instruments, including synthesizer and computer
- Describe ways that people are involved in music within a community, including composers, arrangers, performers, engineers, patrons and listeners

Strands
- Understand that works of art have a general cultural style that reflects the values, beliefs, particular ways of perceiving the world, and varying levels of resources and technology
- Learn that multiple careers exist in the music industry, and each artist uses specific knowledge in their work
- Have an opportunity to broaden their interests in music and transform their personal experience into different art forms

Course Content

When we listen to a song, what is it exactly that we are listening to? As a cultural function, music can be a form of communication, an accompaniment to spiritual rituals, pure entertainment, something to dance to, a reflection of contemporary culture, a political response to current events, or more. What we listen for and expect from the music we hear often depends on how we want to use it.

But before we can go out and just buy the songs that we like, it has to be there in the store. Who makes the music? How do they decide what music to make? Does a composer decide how the music will be used? What is the difference between the composer and the performer? Who writes the words—and when? Does it matter who the musicians are? And how does it get to us, the listener?

In today's digital world, there are quite a few people who are involved in this process. The collaboration of composers, arrangers, performers, producers and engineers is represented by one small disc. But **how** do ideas get from the composer and performer to the little disc we put in our CD player? What does a producer do? How do they put all those sounds on a piece of plastic? What's an engineer?

Get ready to ask these questions, and more, of our host Corey Allen. In this session Corey will help us understand the process of producing a CD. We'll follow along as he takes a musical idea and develops a composition, adds lyrics and arranges it. We'll listen as it is performed by Cheryl Bentyne, and watch as it is produced in a studio. You and your students will have an opportunity to help make decisions along the way, helping to design the final product.

Photo provided by Young Chang America, Inc.

What's in a Song? (continued)

Materials

MCET will provide a curriculum package with suggestions for integrating music into your classroom including listening activities, a glossary of technical industry terms, and cooperative math, social studies and writing extension activities.

Faculty:

Corey Allen's professional background covers the entire spectrum of the music business. He has been a record producer, and composer whose credits include compositions and arrangements for "The Tonight Show" with Jay Leno, Fox Television's "Late Show with Joan Rivers," "Eye On Hollywood" and "The Pat Sajak Show." He arranged music for Diana Ross' 1989 concert tour; was Musical Director for Mitzi Gaynor; Musical Director and Arranger for the joint tour of the Glenn Miller Orchestra and the musical "The All Nite Strut" and regularly conducts and arranges for The Manhattan Transfer. As a keyboardist, Corey has performed with some of the most successful names in Jazz and show business: Doc Severensen, Kim Bassinger, Jack Jones, The Manhattan Transfer, Arthur Fiedler, Alex Acuna, and Charo.

Cheryl Bentyne's preparation for a life in music began early as a singer in her dad's band while she was still in high school. Then, in 1979, her manager told her about an audition that was to change Cheryl's life—The Manhattan Transfer was looking for a new singer, a "soprano who was gifted and agile enough to immediately blend with the unique four-part harmony sound they had while possessing a strong individual musical personality which would contribute to the group's evolution." Cheryl's contribution was immediate and decisive; The Manhattan Transfer won it's first Grammy award in 1980 for *Birdland.* The group has collected ten Grammy awards—so far. Cheryl won her own Grammy (along with Bobby McFerrin) for the vocal arrangement of *Another Night In Tunisia.* In 1994 she performed with the Saint Louis Pops and is scheduled to appear next year with the Boston Pops. Cheryl has worked to promote music education programs through "Grammy in the Schools".

Live Sessions

MON Jan. 27 1:00pm - 1:50pm 1/1

Rebroadcast Sessions

WED Jan. 29 10:00am - 10:50am 1/1
MON Feb. 3 2:00pm - 2:50pm 1/1
FRI Jun. 13 1:00pm - 1:50pm 1/1

Registration Deadline

January 10

4-6

The Arts

YouthLinks: Youth Empowering Youth to Improve Health

Program Code: 97058

Once a month, student hosts will visit with a different group of peer leaders to learn how they work with other teens on a particular health topic.

7-12

Health

Audience
Students grades 7-12

Presenters
Youth hosts

Developer
HealthLinks Project

Course Content
Health issues are crucial in the lives of teenagers today. Teen pregnancy, AIDS, violence, and substance abuse are just a few of the topics that are foremost in the minds of teens.

In each session of this 6-part series, continued from the fall, student hosts will visit with a different group of teen peer leaders who work on empowering other teens around a certain health issue. Students will interview the teens and the adults who work with them in order to help the audience learn more about community health issues that affect them.

February 12: Media Literacy

March 12: Tolerance

April 9: Sexual Harassment

Live Sessions

WED	Feb. 12	10:00am - 10:50am	4/6
WED	Mar. 12	10:00am - 10:50am	5/6
WED	Apr. 9	10:00am - 10:50am	6/6

Rebroadcast Sessions

FRI	Feb. 14	2:00pm - 2:50pm	4/6
MON	Feb. 24	10:00am - 10:50am	4/6
FRI	Mar. 14	12:00pm - 12:50pm	5/6
MON	Mar. 17	10:00am - 10:50am	5/6
FRI	Apr. 11	11:00am - 11:50am	6/6
WED	Apr. 16	2:00pm - 2:50pm	6/6

For your convenience, each session of this program will be rebroadcast in June:

FRI	Jun. 13	12:00pm - 12:50pm	1/6
MON	Jun. 16	12:00pm - 12:50pm	2/6
TUE	Jun. 17	12:00pm - 12:50pm	3/6
WED	Jun. 18	12:00pm - 12:50pm	4/6
THU	Jun. 19	12:00pm - 12:50pm	5/6
FRI	Jun. 20	12:00pm - 12:50pm	6/6

Registration Deadline
January 10

Please note: if you registered for this program in the fall, it is not necessary to register again. If you are registering for the first time, you will receive materials for the fall sessions.

This program is supported by the U.S. Department of Education, Office of Educational Research and Improvement, Star Schools Program Grant #R203A40011.

Curriculum Frameworks Alignment

Health

Strands

- Students understand current concepts of health promotion, disease prevention, and risk assessment in relationship to lifelong health
- Students analyze the impact of social (including media), cultural, economic, and environmental factors on health
- Students demonstrate the ability to assess risk, consider potential consequences, and make health-enhancing decisions
- Students practice behaviors that protect and enhance their physical, intellectual, emotional, and social health
- Students communicate health information clearly and accurately
- Students contribute actively to the health of their families, peers, schools, communities, and natural environment
- Students collaborate with family, peers, school staff, and members of the community to create and maintain safe and supportive environments

Standards

- Examine and present examples of how communities respond to health needs of individuals and families
- Research and analyze how economic factors affect health
- Develop short-term, long-term, and lifelong personal health and fitness goals
- Distinguish types and degrees of risk
- Identify the legal, social, and personal consequences of potentially harmful behavior
- Identify the benefits of past health behaviors with respect to higher education, employment, and medical treatment
- Use technology to research and communicate current health information
- Teach about and model healthful behaviors to peers and other students
- Identify and analyze factors in the social environments of school and community that support resilience

Echanges

Program Code: 97023

Audience

French language classes, grades 9-12

Presenter

Christian DeRobert

Curriculum Frameworks Alignment

Through its interactive format, as well as suggested preparatory and follow-up activities, *Echanges* supports many strands of the World Languages Framework. Students will obtain information, probe for details, express ideas, and participate in conversations. Session topics are chosen to help students gain an understanding of Francophone culture.

Course Content

Echanges brings timely and exciting topics in francophone culture into your classroom. In an interactive session, students might converse with their peers in another part of the world, test their knowledge in a game show, or learn to cook, dance, or sing. Sessions are conducted entirely in French by native speakers and offer ample opportunity for students to ask and answer questions, and frequently to present their own work over the phone or by appearing on the program in person.

Last season, participating classes conversed with students in Strasbourg and Québec, tried to guess the identities of French mystery guests, and learned how to prepare food from around the French-speaking world.

Preparatory materials, including vocabulary, readings, and suggested activities, are provided to registered teachers approximately one month prior to each session.

Topics for the sessions are recommended by a teacher advisory committee that meets at least twice each year. Please contact MCET if you would like to be part of the advisory committee.

Participants in this program should understand spoken French or be at French II level.

Faculty

Christian DeRobert is Director of Education for the French Library and Cultural Center, Boston. He is an experienced teacher in both France and the United States and is currently teaching French at Boston University.

Live Sessions

WED	Feb. 5	1:00pm - 1:50pm	3/4
WED	Apr. 2	1:00pm - 1:50pm	4/4

Rebroadcast Sessions

FRI	Feb. 7	11:00am - 11:50am	3/4
MON	Feb. 10	2:00pm - 2:50pm	3/4
THR	Apr. 3	10:00am - 10:50am	4/4
THR	Apr. 10	2:00pm - 2:50pm	4/4

For your convenience, each session of this program will be rebroadcast in June:

THR	Jun. 5	2:00pm - 2:50pm	1/4
FRI	Jun. 6	2:00pm - 2:50pm	2/4
MON	Jun. 9	2:00pm - 2:50pm	3/4
TUE	Jun. 10	2:00pm - 2:50pm	4/4

Fall Rebroadcast Sessions in January

FRI	Jan. 24	1:00pm - 1:50pm	1/4
FRI	Jan. 31	1:00pm - 1:50pm	2/4

Registration Deadline

January 10

Please note: if you registered for this program last fall, it is not necessary to register again. If you missed last fall's programs, you can still view them when they are rebroadcast this spring. Check the above *Fall Rebroadcast Sessions* for dates and times.

Under the Dome: The State Legislative Process

Program Code: 97004

Witness the action that occurs under the dome of the Massachusetts State House.

9-12

Social Studies

Audience

Grades 9-12

Course Content

This broadcast will address the Massachusetts governing infrastructure from a case-study perspective. Students will examine the process by which an issue becomes a law, as well as the history of the Massachusetts government, the Massachusetts Constitution, the structure and function of the executive and legislative branches, and the difference between state and federal government.

This program will allow students to assume the roles of legislators, lobbyists, the media and constituents. When students debate a bill currently being addressed in the Legislature, they will be assisted by mentors from the executive and legislative branches of government.

Live Session

WED	Mar. 26	1:00pm - 1:50pm	1/1

Rebroadcast Sessions

THR	Mar. 27	2:00pm - 2:50pm	1/1
WED	Apr. 2	10:00am - 10:50am	1/1
TUE	Jun. 3	2:00pm - 2:50pm	1/1

Registration Deadline

February 7

Learning to Lead

Program Code: 97036

This spring, students across the country will interact directly with members of Congress, getting first-hand experience in the federal legislative process by researching, questioning, testifying, debating, amending, and voting on proposed legislation on drugs or crime.

Through research, preparing testimony, and translating their position into a legislative proposal, they will come to understand the role that they must play as citizens.

Audience

Grades 8-12

Course Content

What steps can we take to reduce illegal drug use and crime? How do we reduce them while still guarding our freedoms? (For example, should people be drug tested when they apply for driver's licenses, or is this an infringement of our vital civil liberties?) Congress grapples with these issues through passing laws, and we will follow a crime- or drug-related bill through the legislative process.

High school students across the country are invited to voice their opinions on one of the bills being debated in Congress and to translate their knowledge into legislation.

Program Overview:

1. Teachers register to participate in the program and receive a packet of preparatory materials. These materials will include general background reading on crime and drugs, specific information about a Congressional bill under debate, suggested readings and lesson plans for teachers, and detailed instructions for participating in the program.

2. Students and teachers study the issues and the legislation and prepare to participate in the live sessions. Preparation may include research, conducting interviews and polls, and contacting local legislators and interest groups to learn their positions.

3. Classes tune in to the Mass LearnPike for three live sessions:

March 6
A press conference with a key supporter and a key opponent of the bill under consideration. Taking the role of the press, students phone in questions. Classes that cannot participate in the live session may submit questions by email, fax, or mail that will be asked during the live session as time allows.

Students follow up the broadcast by writing articles for their school or local newspapers. Articles submitted to the Mass LearnPike will be posted on our web page.

March 20
Broadcast live from Washington, DC, this session is a hearing conducted by Members of Congress. Students will call in to present testimony that they have prepared in advance and then answer questions from the legislators, just as in a public hearing.

Students follow up the broadcast by conducting an in-class markup session and writing amendments.

April 3
Broadcast live from Washington, DC, this session takes the bill from committee to the floor where students will present their amendments. Members of Congress, as well as other students, will debate the amendments and then vote on them. The session will end with a final vote on the bill as amended.

Live Sessions

THU	Mar. 6	1:00pm - 1:50pm	1/3
THU	Mar. 20	1:00pm - 1:50pm	2/3
THU	Apr. 17	1:00pm - 1:50pm	3/3

Rebroadcast Sessions

FRI	Mar. 7	12:00pm - 12:50pm	1/3
WED	Mar. 12	3:00pm - 3:50pm	1/3
FRI	Mar. 21	3:00pm - 3:50pm	2/3
WED	Mar. 26	2:00pm - 2:50pm	2/3
WED	Apr. 30	3:00pm - 3:50pm	3/3
MON	May 5	10:00am - 10:50am	3/3

For your convenience, each session of this program will be rebroadcast in June:

TUE	Jun. 10	1:00pm - 1:50pm	1/3
WED	Jun. 11	1:00pm - 1:50pm	2/3
THU	Jun. 12	1:00pm - 1:50pm	3/3

Registration Deadline

February 28

To Register:

Use the attached form to register for this program. If your school is not currently an MCET member, please call (617) 252-5700 ext. 717 or via email at priscill@mcet.edu.

For more information

If you have questions about the content of the program, please call or write: Learning to Lead Curriculum Developer, MCET, One Kendall Square, Cambridge, MA 02139; Telephone (617) 252-5700.

9-12

Social Studies

Take Off! Part II

Program Code: 97033P

Explore the exhilarating world of flight. Get students excited about math and science through an introduction to lift and drag, aircraft design, ballooning, weather, instrumentation, flight simulators, and navigation, and introduce them to the possibilities for exciting work in aviation.

Audience
Grades 9-12

9-12

Presenter
David Price

Includes members of the Federal Aviation Administration, Bridgewater State College aviation faculty, pilots, and others involved in various aspects of aviation.

Science and Technology

PROFESSIONAL DEVELOPMENT 5.6 POINTS

Curriculum Frameworks Alignment

Science and Technology

Strands
- Technology
- Domains of Physical Science
- Domain of Earth and Space Sciences

Standards
- Understand the design process and using it to plan devices
- Understand choice of materials, ways that tools are used to understand, measure, or solve problems
- Learn about technology and change in Society
- Forces, motion and changes in motion of objects
- Understanding weather: properties of the atmosphere such as pressure, temperature, humidity, wind speed and direction, and the significance of different kinds of clouds

TAKE OFF!

Course Content

Students and teachers can learn together about the principles and history of human flight. During the seven broadcasts, the course explores both basic science and its practical technology applications, and is intended to inspire students, especially those uninterested in traditional science classes, with the possibilities of careers in aviation.

On-air training will familiarize teachers with the curriculum and teaching strategies being explored in this project. MCET Staff and Advisors from aviation organizations and educational institutions will provide guidance for teaching aeronautics, and will assist in integrating the content into existing science and math curricula. Project experiments will be demonstrated on air. Project staff will provide tips for teachers on using distance learning technologies and the Internet in their classrooms and suggest practical strategies for involving girls and minority students in math and science classes. Teachers will have the opportunity to ask questions of the presenters and their colleagues, on air, and via phone, fax, or computer networking.

Take Off! Part II (continued)

Specific topics include:

The mystery of flight, beginning with an investigation into the flight environment—the air. Students will see different kinds of aircraft in flight, and learn about the history of human efforts to fly. The observation that air is a fluid medium will lead to hands-on demonstrations to illustrate its properties.

Participants will examine the question: "How does an airplane fly?" through learning about the four forces of flight: lift, gravity, thrust, and drag, and by watching and doing wind tunnel experiments to see the effects of varying air pressure and wing design.

Weather: Students will see how different branches of science relate to each other by understanding how meteorology influences aircraft and airport runway design according to prevailing wind patterns. Weather systems and meteorological factors, like air pressure and temperature variations, will be investigated. Air traffic controllers will explain how flight plans are affected by weather.

Instruments: Video footage produced by the FAA will allow students to see the cockpit of a plane. A portable flight simulator will enable students to see the instruments in a plane: altitude indicator, directional gyroscope, turn coordinator, etc. During a simulated flight, students will be asked to calculate the rate of descent, and to call in their answers to problems posed by the pilot.

Navigation: A navigation expert will give an overview of the history of navigation, showing how the technology has evolved. Students will conduct simple experiments that illustrate magnetic fields and radio waves, witness a demonstration of satellite navigation, create a home-made compass, and understand a simple navigation exercise.

Careers: The program will explore aviation careers, by presenting aviation specialists (air traffic controllers, pilots and co-pilots, chief operation managers, engineers, mechanics and much more) throughout the series, with visits to airport facilities, on-the-job interviews and guests available in the studio to answer student questions.

Guests: Guests on the broadcasts will include people working in many branches of aviation, representatives from aviation schools, and the FAA.

Internet activities: Internet activities will complement the broadcasts. Teachers and students will be able to share ideas, experiences, and activities on line. Participants will be able to join existing collaborative activities on the internet, or design and publish their own. (http://www.mcet.edu/nasa/)

Live Sessions

THR	Feb. 6	3:00pm - 3:50pm	(Teacher Session)	1/7
MON	Feb. 24	1:00pm - 1:50pm		2/7
MON	Mar. 10	1:00pm - 1:50pm		3/7
MON	Mar. 24	1:00pm - 1:50pm		4/7
MON	Apr. 7	1:00pm - 1:50pm		5/7
MON	Apr. 28	1:00pm - 1:50pm		6/7
MON	May 5	1:00pm - 1:50pm		7/7

Rebroadcast Sessions

WED	Feb. 12	11:00am - 11:50am	(Teacher Session)	1/7
FRI	Feb. 14	12:00pm - 12:50pm	(Teacher Session)	1/7
THR	Feb. 27	2:00pm - 2:50pm		2/7
MON	Mar. 3	10:00am - 10:50am		2/7
WED	Mar. 12	2:00pm - 2:50pm		3/7
THR	Mar. 13	10:00am - 10:50am		3/7
THR	Mar. 27	10:00am - 10:50am		4/7
MON	Mar. 31	1:00pm - 1:50pm		4/7
WED	Apr. 9	2:00pm - 2:50pm		5/7
MON	Apr. 14	10:00am - 10:50am		5/7
WED	Apr. 30	11:00am - 11:50am		6/7
FRI	May 2	3:00pm - 3:50pm		6/7
FRI	May 9	2:00pm - 2:50pm		7/7
MON	May 12	10:00am - 10:50am		7/7

For your convenience, each session of this program will be rebroadcast in June:

THR	May 29	3:00pm - 3:50pm	(Teacher Session)	1/7
FRI	May 30	3:00pm - 3:50pm		2/7
MON	Jun. 2	3:00pm - 3:50pm		3/7
TUE	Jun. 3	3:00pm - 3:50pm		4/7
WED	Jun. 4	3:00pm - 3:50pm		5/7
THR	Jun. 5	3:00pm - 3:50pm		6/7
FRI	Jun. 6	3:00pm - 3:50pm		7/7

Registration Deadline

January 10

This program is supported through a cooperative agreement award (NCC 2-915) from the National Aeronautics and Space Administration, High Performance Computing Office (HPCC), as part of the Information Infrastructure Technology and Applications (IITA) Program .

9-12

Science and Technology

PROFESSIONAL DEVELOPMENT 5.6 POINTS

Mutations Cause Disease: What Causes Mutations?

Program Code: 97049

This series offers a multi-disciplinary approach to explore health effects resulting from human exposure to contaminants, focusing on the capacity of environmental agents to induce genetic mutations in human cells.

Audience

Grades 9-12

9-12

Science

Health

Presenters

The program is developed in collaboration with the Center for Environmental Health Sciences at the Massachusetts Institute of Technology. The Center's projects, under the direction of professor William G. Thilly, are focused on the discovery of the agents in our environment responsible for genetic mutations in humans, and involve researchers from many disciplines: Toxicology, Biology, Chemistry, Geology, Physics, Engineering and others.

Curriculum Frameworks Alignment

Science and Technology

Strands

- Unifying concepts and processes in science
- Evidence, models and explanations
- Science as Inquiry
- Abilities necessary to do scientific inquiry
- Understanding the scientific inquiry process
- Domains of Science- Life Sciences
- Organisms and Environments
- Domains of Science: Earth and Space Science
- Interactions and cycles in the earth system

Health

Strands

- Health Literacy

Course Content

The course investigates health effects, in particular genetic mutations, induced by environmental agents, chemical, biological or radiation. Participating students and teachers will engage in an exciting scientific investigation activity. The students-detectives will try to solve the mystery behind an anomalous high number of liver cancer victims discovered by a physician in the city of Danvill. Through data and clues revealed in the course of the program, participants will follow the work of doctors and Health Commissioner in that community, as they search for the possible cause for the disease and a mechanism by which the hazardous substance's cycle interacts with human beings. Students will report the results of their investigations to the scientists in the studio.

Scientists also face a detective-story scenario, where the crime is represented by genetic mutations, the victims are human cells and the suspects include environmental agents like chemicals and radiation in the environment, chemicals manufactured by the body, or typographical errors iterated generation after generation in the process of duplications of billions of genetic "letters" per cell. Faculty from MIT Center for Environmental Health Sciences will illustrate how chemicals move through the environment, how they interact with humans, and how to search the human body for fingerprints of mutagens. Following the broadcasts, participating students will have the opportunity to apply the investigative model to research environmental issues in their community, assisted by a team of environmental scientists.

Live Sessions

MON Mar. 17	1:00pm -	1:50pm	1/3
MON Apr. 14	1:00pm -	1:50pm	2/3
MON May 12	1:00pm -	1:50pm	3/3

Rebroadcast Sessions

WED Mar. 19	1:00pm -	1:50pm	1/3
THR Mar. 20	2:00pm -	2:50pm	1/3
THR Apr. 17	2:00pm -	2:50pm	2/3
WED Apr. 30	10:00am -	10:50am	2/3
WED May 14	10:00am -	10:50am	3/3
MON May 19	3:00pm -	3:50pm	3/3

Registration Deadline

February 7

This program is supported by a Core Center Award, P30-ES02109, from the National Institute of Environmental Health Sciences, National Institutes of Health.

Integrating Technology and Health Into Your Curriculum

Program Code 97059P

This 6-session series, continued from the fall, will help teachers learn how to integrate a variety of telecommunications technologies into their classrooms to improve their teaching of health, literacy, work readiness, and other social-issues topics.

Audience

Teachers grades 7-12, and the staff of community organizations

Presenters

Raymond M. Rose, The Concord Consortium
HealthLinks Project site staff

Developer

HealthLinks Project

Course Content

Many teachers are becoming more familiar with using telecommunications technologies such as the Internet, satellite television, computer programs, camcorders, and videodisks, but they are still having difficulty seeing how these technologies can become a part of their regular classroom curriculum.

Teachers who are involved in the *HealthLinks* Project will discuss their uses of a different technology each session. We will visit their classrooms, and see how they integrate the technology into their everyday curriculum.

For example, teachers will demonstrate their use of CD-ROM/Software, video conferencing and multiple technologies as they integrate topics like substance abuse, HIV/AIDS, and violence prevention into their Math, Science, and English classrooms. They will use student-developed newspapers, web sites, and other projects to make curriculum connections among these topics.

Live Sessions

THR	Feb. 27	3:00pm - 3:50pm	4/6
THR	Mar. 27	3:00pm - 3:50pm	5/6
THR	May 1	3:00pm - 3:50pm	6/6

Rebroadcast Sessions

FRI	Feb. 28	10:00am - 10:50am	4/6
FRI	Mar. 7	2:00pm - 2:50pm	4/6
MON	Mar. 31	10:00am - 10:50am	5/6
WED	Apr. 2	2:00pm - 2:50pm	5/6
FRI	May 2	11:00am - 11:50am	6/6
WED	May 7	2:00pm - 2:50pm	6/6

For your convenience, each session of this program will be rebroadcast in June:

MON	Jun. 2	1:00pm - 1:50pm	1/6
TUE	Jun. 3	1:00pm - 1:50pm	2/6
WED	Jun. 4	1:00pm - 1:50pm	3/6
THR	Jun. 5	1:00pm - 1:50pm	4/6
FRI	Jun. 6	1:00pm - 1:50pm	5/6
MON	Jun. 9	1:00pm - 1:50pm	6/6

Registration Deadline

February 7

MCET Wins National Distance Learning Award

The Massachusetts Corporation for Educational Telecommunications captured first-place honors for *Best Distance Learning Program Via The Internet K-12* at the fifteenth annual TeleCon Awards Dinner held recently in Anaheim, California.

The winning web site entry, *Cybertimes of Reginald,* was produced by MCET's *HealthLinks,* an initiative funded by the United States Department of Education Star Schools Program, to bring educational resources to traditionally underserved learners, both locally and from across the country.

Please note: If you registered for this program in the fall, it is not necessary to register again. If you are registering for the first time, you will receive materials for the fall sessions. If you wish to earn PDPs you must view the entire series and return the evaluation. Please refer to page 7.

This program is supported by the U.S. Department of Education, Office of Educational Research and Improvement, Star Schools Program Grant #R203A40011.

Professional Development

Health

PROFESSIONAL DEVELOPMENT 2.4 POINTS

Future Shock in Higher Education

Program Code: 97029

Audience

Higher Education professionals

Presenters

Dr. James Martin and
Dr. James E. Samels

Course Content

Thursday, February 20
Boston Beanpot: Athletics and Ethics

This program will examine athletes as student role models and the protection of institutional integrity. Over the past several years, a number of highly-publicized incidents involving athletes on New England campuses have drawn the attention of the media and the general public.

For this broadcast, Martin and Samels will conduct a roundtable discussion with spokespersons from several colleges and universities which explores "best practices" for students, administrators, and their institutions concerning the role and value of athletics, both inter-collegiate and intramural, on their campuses.

Thursday, March 20
Campus Security: Safeguarding the Citadel

From campus lighting to late-night escort services, this program will guide institutions in meeting the emergent challenges of shifting community safety standards. As classes now meet at many hours of the day, and libraries and other campus facilities are sometimes open on a 24-hour basis, the preservation of campus safety and the management of campus security have become far more complex and costly, even for campuses that are small both in size and population. This discussion will include directors of campus safety and will examine the often hidden issues which confront all institutions along with the methods to address them.

Thursday, April 17
New England's Higher Education Media Market: The Fourth Estate

In the third program of the fall season, a panel will examine changing campus standards and new challenges provoked by them, in keeping college and university students safe during periods of significant personal growth and exploration. The hosts will be joined by a group of presidents, deans of students, and campus safety directors to consider what is required to protect the "citadel," in a popular view, from the advance of new patterns of crime in college, including often-overlooked problems such as domestic abuse and computer theft.

Faculty

Dr. James Martin is Vice President for Academic Affairs at Mount Ida College in Newton, Massachusetts. Dr. James E. Samels is a noted higher education attorney and President of the Samels Group, a Natick, Massachusetts higher education consulting firm. They are the authors of *Merging Colleges for Mutual Growth* and the forthcoming *First Among Equals: The Roles of the Chief Academic Officer.*

Live Sessions

THR	Feb. 20	3:00pm - 3:50pm	4/6
THR	Mar. 20	3:00pm - 3:50pm	5/6
THR	Apr. 17	3:00pm - 3:50pm	6/6

Rebroadcast Sessions

MON	Feb. 24	2:00pm - 2:50pm	4/6
FRI	Feb. 28	12:00pm - 12:50pm	4/6
FRI	Mar. 21	12:00pm - 12:50pm	5/6
MON	Mar. 24	10:00am - 10:50am	5/6
FRI	Apr. 18	11:00am - 11:50am	6/6
WED	Apr. 30	2:00pm - 2:50pm	6/6

Registration Deadline

February 7

Dr. James E. Samels (seated) and Dr. James Martin

Telecommunicate!: Exploring the Internet

Program Code: 97052P

This year Telecommunicate! *offers something for everyone who wants to integrate computer technology into his or her classroom.*

Audience

Teachers grades K-12

Presenters

Marie Gannon with guest scientists, teachers, and students

Curriculum Frameworks Alignment

Science and Technology

Strands

- Technology
- Understanding and using technology in society
- The design process

Standards

- The nature and impact of technology
- Technology yesterday, today, and tomorrow
- The tools and machines of technology
- Resources of technology
- Technological areas of communication

Course Content

More teachers are using the Internet every year. The Internet allows students to learn by doing real-world projects that involve researching information online and contacting experts who are accessible by email. The Internet also allows teachers to access resources from each other by collaborating on projects and developing curriculum.

In this season of *Telecommunicate!* we will explore educational applications of the World Wide Web, looking at and evaluating information, following on-going curriculum projects, and highlighting uses in the classroom.

Session 1:
What's on the Internet
A demonstration and evaluation of what kinds of materials are available on the Internet and how they are organized. We will highlight teacher sites that select and organize information in ways helpful for the K-12 practitioner.

Session 2:
Finding What You Need
An examination of different search strategies and tools to make finding and selecting information easier.

Session 3:
Classroom Projects
We will highlight some on-going curriculum projects, and talk to teachers about their applications of projects we have been following during the course of the programs.

Session 4:
Acceptable Use/Publishing on the Web
An examination of ethical issues in both access and publishing, as we look at schools who are public on the Internet and those sites which invite students to submit their work.

Faculty

Marie Gannon is the Director of the Kresge Center for Teaching Resources at the Lesley College Library.

Graduate Credit

Registered participants have the option of earning one graduate credit from Lesley College Graduate School. The fee for this one credit is $245.00 along with a registration fee. The academic requirements will be sent to all registrants and will be placed in a public area on the program's Web page. Those interested in registering for this credit should contact Marie Gannon at (617) 349-8861.

Requirements

The ability to access the World Wide Web, through either a text or a graphical browser (e.g. Lynx, Mosaic, or Netscape).

Live Sessions

THR	Feb. 13	3:00pm - 3:50pm	1/4
THR	Mar. 13	3:00pm - 3:50pm	2/4
THR	Apr. 10	3:00pm - 3:50pm	3/4
THR	May 8	3:00pm - 3:50pm	4/4

Rebroadcast Sessions

FRI	Feb. 14	3:00pm - 3:50pm	1/4
WED	Feb. 26	10:00am - 10:50am	1/4
FRI	Mar. 14	10:00am - 10:50am	2/4
WED	Mar. 19	2:00pm - 2:50pm	2/4
WED	Apr. 16	3:00pm - 3:50pm	3/4
MON	Apr. 28	10:00am - 10:50am	3/4
MON	May 12	3:00pm - 3:50pm	4/4
FRI	May 16	10:00am - 10:50am	4/4

For your convenience, each session of this program will be rebroadcast in June:

WED	Jun. 4	11:00am - 11:50am	1/4
FRI	Jun. 6	11:00am - 11:50am	2/4
WED	Jun. 11	11:00am - 11:50am	3/4
FRI	Jun. 13	11:00am - 11:50am	4/4

Registration Deadline

January 10

Professional Development

Science and Technology

View at a non-facilitated site:

View at MFT facilitated site:

MFT

A Question of Science: Science for K-8 Teachers

Program Code: 97064P

The University of Massachusetts Lowell and MCET offer a ten-session program which provides science content knowledge for K-8 teachers drawn from areas of the National Science Standards. Additionally, an accompanying 12-week WWW-based course is available for graduate credit.

Professional Development

Science

View at a non-facilitated site:

PROFESSIONAL DEVELOPMENT 15 POINTS

View at MFT facilitated site:

PROFESSIONAL DEVELOPMENT 25 POINTS

MFT

Audience

Pre-service and in-service teachers grades K-8 wishing to strengthen their science content knowledge in areas appropriate for the elementary curriculum.

Presenters

Dr. Anita Greenwood, assisted by Michelle Scribner-MacLean and Michael Lucas.

Course Content

Children are naturally curious and ask wonderful questions, such as: What makes a rainbow? Why does blowing on my hot drink cool it? Why do some objects feel cold and others feel warm? These questions can be troublesome for teachers and can prevent them from inquiring with their students.

This course will explore the science behind children's questions which are linked to the theme of *energy*. Content and pedagogy described in the National Science Standards will be addressed by using questions to begin the process of inquiry. Participants may want to purchase a copy of the National Science Standards in advance of the course, available from National Academy Press (1-800-624-6242).

Examples of Session Topics

1. What is science, what is a concept and what is a fact?
2. Do we just get light from the sun?
3. Can we "see" in the dark?
4. Why does the moon shine?
5. Do seeds need light to grow?
6. Have moving things run out of energy when they stop?
7. Why do some objects feel hot and others feel cold?
8. Can we hear under water or in space?
9. What do animals eat?
10. Why is water sometimes liquid, sometimes solid and sometimes gas?

A Question of Science: Science for K-8 Teachers (continued)

Faculty

Dr. Anita Greenwood is an Assistant Professor of Science Education at the UMass Lowell Campus. She has conducted numerous in-service programs for elementary school teachers as well as teaching methods courses for pre-service teachers.

She is particularly concerned with making science concepts accessible to teachers without a science background and models appropriate strategies for assisting individuals as they construct their understanding.

Materials

Participants will be sent a curriculum package including materials and a resources list. Teachers in the studio with Dr. Greenwood will perform the activities and viewers will have the opportunity to discuss what they see and hear through the use of email and audiobridge.

Live Sessions

MON	Jan. 27	3:00pm - 4:30pm	1/10
MON	Feb. 3	3:00pm - 4:30pm	2/10
MON	Feb. 10	3:00pm - 4:30pm	3/10
MON	Feb. 24	3:00pm - 4:30pm	4/10
MON	Mar. 3	3:00pm - 4:30pm	5/10
MON	Mar. 10	3:00pm - 4:30pm	6/10
MON	Mar. 24	3:00pm - 4:30pm	7/10
MON	Mar. 31	3:00pm - 4:30pm	8/10
MON	Apr. 7	3:00pm - 4:30pm	9/10
MON	Apr. 14	3:00pm - 4:30pm	10/10

Rebroadcast Sessions

MON	Jun. 16	1:00pm - 2:30pm	1/10
MON	Jun. 16	2:30pm - 4:00pm	2/10
TUE	Jun. 17	1:00pm - 2:30pm	3/10
TUE	Jun. 17	2:30pm - 4:00pm	4/10
WED	Jun. 18	1:00pm - 2:30pm	5/10
WED	Jun. 18	2:30pm - 4:00pm	6/10
THU	Jun. 19	1:00pm - 2:30pm	7/10
THU	Jun. 19	2:30pm - 4:00pm	8/10
FRI	Jun. 20	1:00pm - 2:30pm	9/10
FRI	Jun. 20	2:30pm - 4:00pm	10/10

To receive professional development points through MCET:
MCET members may receive 15 PDPs by following the instructions for MCET Registration on page 63.

To receive graduate credit from UMass, Lowell:
To receive information and additional requirements for earning graduate credit contact the college of education at (508) 934-4602.

Cost of Graduate Credit:
The fee is $219.42 for one credit, and $632.26 for three credits.

To receive graduate credit from UMass, Lowell, live participation in this program is required:

To earn:
One graduate credit you must participate in 10 on-air sessions and a classroom-based assignment, register for course #04.502 (201)

To earn:
Three graduate credits you must participate in 10 on-air sessions and 15 WWW on-site sessions. Register for course #02.563 (201).

Note: If you are registering for credit, it is not necessary to register for PDPs.

Registration Deadline

January 10

Professional Development

Science

View at a non-facilitated site:

View at MFT facilitated site:

MFT

UNIVERSITY OF MASSACHUSETTS LOWELL

The Annenberg/CPB Channel is a television and web service providing live and taped education and professional development programs to educators, parents and other professionals concerned with improving the quality of math and science education. Information and resources are available at http://www.learner.org/k12/acpbtv.

Winter/Spring Program Descriptions

Private Universe Teacher Workshops
Producer: Harvard-Smithsonian Center for Astrophysics
These workshops feature discussions and video clips that illustrate common student preconceptions and strategies for making teaching more effective.

Science Images
Producer: North Central Regional Educational Laboratory (NCREL)
Each program focuses on a lesson in Grade 1-8 physical or life sciences that unfolds over several days, using the lesson as a lens to examine issues of teaching and learning.

Visualizing Growth
Producer: WNED Buffalo
This library shows teachers observing the work of scientists and working with museum curators to develop hands-on activities for their students.

Challenge Me!
Producer: KTCA-TV
Part of two awareness kits to help teachers and administrators prepare to use the National Science Education Standards.

Science...Simply Amazing
Producer: Thirteen/WNET
Part of an awareness kit that helps parents understand the need for improvements in their children's science education, this video encourages parents to support those improvements through their local schools.

Video Case Studies in Science Education
Producer: Harvard-Smithsonian Center for Astrophysics
These 25 half-hour programs feature K-8 teachers reflecting upon their practice and implementing new strategies to change the way they teach science.

Teaching Math: A Video Library, K-4; 5-8; 9-12
Producer: WGBH Boston
Based on the National Council of Teachers of Mathematics Curriculum and Evaluation Standards, the libraries show a broad geographic and demographic range of classrooms where the standards are being used.

Math for All
Producer: ETN (Education Telecommunications Network)
These programs explain to parents, especially of minority children and girls in grades K-3, why the new math skills are important and how parents can reinforce them by doing activities at home.

Math for All Plus, Matemáticas Por Todos Y Mas
Producer: ETN (Education Telecommunications Network)
These programs explain to parents, especially of minority children and girls in grades 4-6, why the new math skills are important and how they can reinforce them by doing activities at home. (English and Spanish versions)

Brighter Futures through Partnerships
Producers: Andrew Weintraub Productions and Hughes Electronics
These programs demonstrate to educators and members of the community positive ways in which large businesses can contribute to education reform.

Math and Science for All
Producer: Montana Public Television
These videos highlight projects that focus on different facets of math and science education reform.Target groups include Native American students at all levels, special needs high school students in math, and math and science teachers in rural schools.

Restructuring Mathematics: Making Change
Producer. Satellite Educational Resources Consortium (SERC)
Administrators and teachers in schools using the new math standards candidly discuss the problems they had to overcome to make new approaches work and the benefits these changes bring to the entire school community.

Calculating Change
Producers: Pacific Street Films and the National Urban League
This documentary profiles individuals and programs that introduce new ways of learning math and science, and explains why math and science education needs to change.

The Saturday Academy Story: A Guide for Business Action in Science and Math Reform
Producer: Oregon Public Broadcasting
This video documents successful programs that provide students with opportunities for enriched learning and contact with professionals at local businesses.

PRISM Parent Outreach Videos
Producers: WNET and National Urban League
Videos profile individuals and programs that are teaching math and science and involving parents as partners in their children's education.

Annenberg/CPB Channel Live Interactive Workshop Series

Program Code: 97041P

This eight-part live workshop series will offer teachers an opportunity to investigate science education reform.

Audience

Teachers K-12

Presenter

Dr. Kathleen Fisher and other leading educators from across the country will facilitate these discussions of science education reform.

Course Content

These programs will offer teachers the opportunity to explore issues in science education reform and their impact on the classroom. Participants will be provided an opportunity to observe other teachers practicing a variety of strategies that have emerged from recent findings about teaching and learning science. These strategies include incorporating students' prior knowledge into science lessons, emphasizing the goal of teaching for understanding, and uncovering new ways to meet the needs of diverse learners.

During the eight-part series, participants will view segments from many highly successful Annenberg/CPB programs on science education reform. Participants will be encouraged to share personal and professional experiences over the audiobridge as well as by phone, fax, email, and the Web.

Faculty

Dr. Kathleen M. Fisher is a Professor of Biology and a member of the Center for Research in Mathematics and Science Education at San Diego State University (SDSU) where she teaches biology to prospective elementary school teachers.

Her research focuses on conceptual learning of biology and how it might be enhanced with a Macintosh-based learning tool, SemNet.® Professor Fisher was the presenter for the interactive forum for the Private Universe Teacher Workshops in 1995.

Live Sessions

TUE	Feb. 25	3:15pm - 5:15pm	1/8
TUE	Feb. 25	6:15pm - 8:15pm	1/8
TUE	Mar. 4	3:15pm - 5:15pm	2/8
TUE	Mar. 4	6:15pm - 8:15pm	2/8
TUE	Mar. 11	3:15pm - 5:15pm	3/8
TUE	Mar. 11	6:15pm - 8:15pm	3/8
TUE	Mar. 18	3:15pm - 5:15pm	4/8
TUE	Mar. 18	6:15pm - 8:15pm	4/8
TUE	Mar. 25	3:15pm - 5:15pm	5/8
TUE	Mar. 25	6:15pm - 8:15pm	5/8
TUE	Apr. 1	3:15pm - 5:15pm	6/8
TUE	Apr. 1	6:15pm - 8:15pm	6/8
TUE	Apr. 8	3:15pm - 5:15pm	7/8
TUE	Apr. 8	6:15pm - 8:15pm	7/8
TUE	Apr. 15	3:15pm - 5:15pm	8/8
TUE	Apr. 15	6:15pm - 8:15pm	8/8

Rebroadcast Sessions

THR	Feb. 27	11:00am - 1:00pm	1/8
THR	Feb. 27	4:00pm - 6:00pm	1/8
THR	Feb. 27	6:00pm - 8:00pm	1/8
THR	Mar. 6	11:00am - 1:00pm	2/8
THR	Mar. 6	4:00pm - 6:00pm	2/8
THR	Mar. 6	6:00pm - 8:00pm	2/8
THR	Mar. 13	11:00am - 1:00pm	3/8
THR	Mar. 13	4:00pm - 6:00pm	3/8
THR	Mar. 13	6:00pm - 8:00pm	3/8
THR	Mar. 20	11:00am - 1:00pm	4/8
THR	Mar. 20	4:00pm - 6:00pm	4/8
THR	Mar. 20	6:00pm - 8:00pm	4/8
THR	Mar. 27	11:00am - 1:00pm	5/8
THR	Mar. 27	4:00pm - 6:00pm	5/8
THR	Mar. 27	6:00pm - 8:00pm	5/8
THR	Apr. 3	11:00am - 1:00pm	6/8
THR	Apr. 3	4:00pm - 6:00pm	6/8
THR	Apr. 3	6:00pm - 8:00pm	6/8
THR	Apr. 10	11:00am - 1:00pm	7/8
THR	Apr. 10	4:00pm - 6:00pm	7/8
THR	Apr. 10	6:00pm - 8:00pm	7/8
THR	Apr. 17	11:00am - 1:00pm	8/8
THR	Apr. 17	4:00pm - 6:00pm	8/8
THR	Apr. 17	6:00pm - 8:00pm	8/8

Registration Deadline

February 7

View at a non-facilitated site:

PROFESSIONAL DEVELOPMENT 16 POINTS

View at MFT facilitated site:

PROFESSIONAL DEVELOPMENT 24 POINTS

MFT

Winter/Spring Math Schedule*

Jan. 6 and 8

Teaching Math K-4: Measurement

Math For All: Time and Money

Jan. 13 and 15

Teaching Math K-4: Statistics and Probability

Math For All: Taking a Chance

Jan. 20 and 22

Teaching Math K-4: Fractions and Decimals

Math For All: Shapes in Space Program 8

Jan. 27 and 29

Teaching Math K-4: Patterns and Relationships

Restructuring Math (30)

Feb. 3 and 5

Teaching Math 5-8 Three Segments

Math For All Plus: Making Connections

Math For All Plus: Conexiones (in Spanish)

Feb. 10 and 12

Teaching Math 5-8 Three Programs

Math For All Plus: Shapes in Space

Math For All Plus: Formas en el Espacio (in Spanish)

Feb. 17-21

School vacation week

Feb. 24 and 26

Brighter Futures Through Partnerships: Meeting the Challenge

Math and Science for All Program 1

Math For All Plus: Information, Please!

Math For All Plus: ¡Informacion por favor! (in Spanish) Program 3

Mar. 3 and 5

Brighter Futures Through Partnerships: Developing Partnerships

Math and Science for All Program 2

Math For All Plus: Is it fair?

Math For All Plus: ¿Es justo? (in Spanish)

Mar. 10 and 12

Brighter Futures Through Partnerships: The Teaching Environment

Math and Science for All Program 3

Math For All Plus: Measure Up!

Math For All Plus: ¡A medir! (in Spanish)

Mar. 17 and 19

Calculating Change

Math For All Plus: We've Got Your Number!

Math For All Plus: ¡Sabemos tu número! (in Spanish)

Mar. 24 and 26

The Saturday Academy (long version)

Math For All Plus: What's my Rule?

Math For All Plus: ¿Cual es mi regla? (in Spanish)

Mar. 31 and April 2

PRISM: Math and Science at Home, Math and Science in School, Math and Science in the Community

Math For All Plus: Connecting Again

Math For All Plus: ¡Vamos a conectar de nuevo! (in Spanish)

Apr. 7 and 9

Teaching Math 9-12: Introduction

Saturday Academy (short version)

Apr. 14 and 16

Teaching Math 9-12

PRISM: Math and Science at Home

Apr. 21-25

School vacation week

Apr. 28 and 30

Teaching Math 9-12

PRISM: Math and Science in School

May 5

Teaching Math 9-12

PRISM: Math and Science in School (rebroadcast)

May 7

Interactive Forum (rebroadcast)

May 12 and 14

Teaching Math 9-12

PRISM: Math and Science in the Community

May 19 and 21

Repeat first fall program (Oct. 21): *Teaching Math K-4:* Problem Solving and Reasoning

May 26 and 28

Repeat second fall program (Oct. 28): *Teaching Math K-4:* Communication and Connections.

Jun. 2 and 4

Repeat third fall program (Nov. 4): *Teaching Math K-4:* Estimation

Math For All: Unmasking Math

Jun. 9 and 11

Repeat fourth fall program (Nov. 18): *Teaching Math K-4:* Number Sense and Numeration

Math For All: Guessing

*** All programs on this page are taped, and will air on Mondays 11:00am-1:00pm, and on Wednesdays 4:00pm-6:00pm and 6:00pm-8:00pm Eastern Time.**

Winter/Spring Science Schedule*

Jan. 7 and 9

Private Universe Teacher Workshops: Constructivism

Visualizing Growth

Jan. 14 and 16

Science Images
Intro, Programs 1 and 2

Jan. 21 and 23

Science Images
Programs 3 and 4

Challenge Me!
Modules 1 and 4

Jan. 28 and 30

Science Images
Programs 5 and 6

Challenge Me!
Module 2

Feb. 4 and 6

Science Images
Programs 7 and 8

Challenge Me!
Module 3

Feb. 11 and 13

Video Case Studies in Science Education

Science...Simply Amazing

Feb. 17-21

School vacation week

Feb. 25

Live, Interactive Teacher Workshop 1 on Science Education

Feb. 27

Interactive Workshop 1 (rebroadcast)

Mar. 4

Live, Interactive Teacher Workshop 2 on Science Education

Mar. 6

Interactive Workshop 2 (rebroadcast)

Mar. 11

Live, Interactive Teacher Workshop 3 on Science Education

Mar. 13

Interactive Workshop 3 (rebroadcast)

Mar. 18

Live, Interactive Teacher Workshop 4 on Science Education

Mar. 20

Interactive Workshop 4 (rebroadcast)

Mar. 25

Live, Interactive Teacher Workshop 5 on Science Education

Mar. 27

Interactive Workshop 5 (rebroadcast)

Apr. 1

Live, Interactive Teacher Workshop 6 on Science Education

Apr. 3

Interactive Workshop 6 (rebroadcast)

Apr. 8

Live, Interactive Teacher Workshop 7 on Science Education

Apr. 10

Interactive Workshop 7 (rebroadcast)

Apr. 15

Live, Interactive Teacher Workshop 8 on Science Education

Apr. 17

Interactive Workshop 8 (rebroadcast)

Apr. 21-25

School vacation week

Apr. 29 and May 1

Repeat first fall program (Oct. 22):
Private Universe Teacher Workshops

Visualizing Growth: Seasons

May 6

Live, Interactive Forum

May 8

Interactive Forum (rebroadcast)

May 13 and 15

Private Universe: Photosynthesis

Visualizing Growth: Insects

May 20 and 22

Private Universe: Electricity

Visualizing Growth: Simple Machines

May 27 and 29

Private Universe: Particles

Visualizing Growth: Ducks

Jun. 3 and 5

Private Universe: Vision

Visualizing Growth: Archeology

Jun. 10 and 12

Private Universe: Friction

Visualizing Growth: Teacher Growth

*** Tuesday and Thursday taped programming will air 11:00am-1:00pm; repeated 4:00pm-6:00pm and 6:00pm-8:00pm. Live, interactive broadcasts will air Tuesdays 3:15pm-5:15pm and 6:15pm-8:15pm Eastern Time.**

JANUARY 97

Daily Broadcast Schedule

MCET broadcasts daily
9:00am-8:00pm Eastern Time.

Calendar Listings

This calendar lists courses by: program code, title, start time, interactive status and program series number. (For example: 3/5 = the 3rd session in a 5-session program.)

Programs marked with **L** are live and interactive.

R shows are rebroadcasts of programs from this season.

T shows are taped programs.

Note: Programs subject to change.

Sunday	Monday	Tuesday
5	6 6058P Mathematics of the Arts for Teachers 10:00am - 10:50am T 1/6 6090P Take Off! Part I 1:00pm - 1:50pm T 1/7 97061P Using Insects in the Classroom 2:00pm - 3:00pm T 1/14 97001 Are You a Target? 3:00pm - 3:50pm T 1/1	7 6058P Mathematics of the Arts for Teachers 10:00am - 10:50am T 2/6 6090P Take Off! Part I 1:00pm - 1:50pm T 2/7 97061P Using Insects in the Classroom 2:00pm - 3:00pm T 2/14 97000 Welcome to the MLP and MEOL 3:00pm - 3:20pm T 1/1
12	13 6058P Mathematics of the Arts for Teachers 10:00am - 10:50am T 6/6 6090P Take Off! Part I 1:00pm - 1:50pm T 6/7 97061P Using Insects in the Classroom 2:00pm - 3:00pm T 6/14 3163 Mass Performance: Little Theatre of the Deaf 3:00pm - 3:50pm T 1/1	14 **Annenberg/CPB Channel** (11:00am-1:00pm, 4:00pm-6:00pm, 6:00pm-8:00pm) *Science Images* *Intro, Programs 1 and 2* Please refer to pages 48 and 49 for complete Annenberg/CPB Channel listings.
19	20 Martin Luther King Day	21 **Annenberg/CPB Channel** (11:00am-1:00pm, 4:00pm-6:00pm, 6:00pm-8:00pm) *Science Images* *Programs 3 and 4* Please refer to pages 48 and 49 for complete Annenberg/CPB Channel listings.
26	27 97011 Children's Authors and Illustrators 1-3 10:00am - 10:50am T 1/1 97018 What's in a Song? 1:00pm - 1:50pm L 1/1 97061P Using Insects in the Classroom 2:00pm - 3:00pm T 13/14 97064P A Question of Science: Science for K-8 Teachers 3:00pm - 4:30pm L 1/10	28 **Annenberg/CPB Channel** (11:00am-1:00pm, 4:00pm-6:00pm, 6:00pm-8:00pm) *Science Images* *Programs 5 and 6* *Challenge Me!* *Module 2* Please refer to pages 48 and 49 for complete Annenberg/CPB Channel listings.

Wednesday	Thursday	Friday	Saturday
1	2	3	4
8 6058P Mathematics of the Arts for Teachers 10:00am - 10:50am T 3/6 97009 Sometimas You Don't Know What to Say 11:00am - 11:50am T 1/1 3180 AIDS Prevention Project 12:00pm - 12:50pm T 1/1 6090P Take Off! Part I 1:00pm - 1:50pm T 3/7 97061P Using Insects in the Classroom 2:00pm - 3:00pm T 3/14 3039 EFT: Discovering Boston's Oldest Synagogua 3:00pm - 3:50pm T 1/1	9 6058P Mathematics of the Arts for Taachers 10:00am - 10:50am T 4/6 6090P Taka Off! Part I 1:00pm - 1:50pm T 4/7 97061P Using Insacts in the Classroom 2:00pm - 3:00pm T 4/14 97000 Welcoma to tha MLP and MEOL 3:00pm - 3:20pm T 1/1	10 6058P Mathematics of tha Arts for Taachers 10:00am - 10:50am T 5/6 3062 Mass Performanca: Tha Woodan Horse Russian Puppet Thaater 11:00am - 11:50am T 1/1 97000 Walcome to the MLP and MEOL 12:00pm - 12:20pm T 1/1 6090P Take Off! Part I 1:00pm - 1:50pm T 5/7 97061P Using Insects in tha Classroom 2:00pm - 3:00pm T 5/14 3059 Mass Performanca: Tha Undarground Railway Thaater 3:00pm - 3:50pm T 1/1	11
15 97007P World of Water 10:00am - 10:50am R 1/15 6004 Mass Performanca: Journay Into Jazz 11:00am - 11:50am T 1/1 97000 Welcome to tha MLP and MEOL 12:00pm - 12:20pm T 1/1 6090P Taka Off! Part I 1:00pm - 1:50pm T 7/7 97061P Using Insacts in the Classroom 2:00pm - 3:00pm T 7/14 6026P Learning Through Drama 3:00pm - 3:50pm T 1/5	16 97007P World of Water 10:00am - 10:30am R 2/15 97000 Welcoma to the MLP and MEDL 1:00pm - 1:20pm T 1/1 97061P Using Insacts in the Classroom 2:00pm - 3:00pm T 8/14 97001 Are You a Target? 3:00pm - 3:50pm T 1/1	17 97007P World of Watar 10:00am - 10:30em R 3/15 97000 Welcome to the MLP and MEOL 11:00am - 11:20am T 1/1 97009 Sometimes You Don't Know What to Say 12:00pm - 12:50pm T 1/1 3039 EFT: Discovaring Boston's Oldest Synagogue 1:00pm - 1:50pm T 1/1 97061P Using Insects in tha Classroom 2:00pm - 3:00pm T 9/14 3062 Mass Performanca: The Woodan Horse Russian Puppet Theatar 3:00pm - 3:50pm T 1/1 97065 Board of Ed. Maating 4:00pm - 8:00pm T	18
22 97007P World of Water 10:00am - 10:30am R 4/15 3059 Mass Performance: The Underground Railway Theatar 11:00am - 11:50am T 1/1 6053P Geology 12:00pm - 12:50pm T 1/8 97000 Welcome to the MLP and MEDL 1:00pm - 1:20pm T 1/1 97061P Using Insects in the Classroom 2:00pm - 3:00pm T 10/14 6026P Learning Through Drama 3:00pm - 3:50pm T 2/5	23 97007P World of Water 10:00am - 10:30am R 5/15 97048 Passport to Knowledge: Live From Antarctica II 1:00pm - 2:00pm L 1/3 97061P Using Insacts in tha Classroom 2:00pm - 3:00pm T 11/14 97000 Walcome to tha MLP and MEOL 3:00pm - 3:20pm T 1/1	24 97007P World of Watar 10:00am - 10:30am R 6/15 3163 Mass Performance: Little Theatra of the Deaf 11:00am - 11:50am T 1/1 97000 Walcome to the MLP and MEDL 12:00pm - 12:20pm T 1/1 97023 Echanges 1:00pm - 1:50pm R 1/4 97061P Using Insects in tha Classroom 2:00pm - 3:00pm T 12/14 3180 AIDS Prevention Project 3:00pm - 3:50pm T 1/1	25
29 97018 What's in a Song? 10:00am - 10:50am R 1/1 97009 Sometimes You Don't Know What to Say 11:00am - 11:50em T 1/1 6053P Gaology 12:00pm - 12:50pm T 2/8 97001 Are You a Target? 1:00pm - 1:50pm T 1/1 97061P Using Insacts in tha Classroom 2:00pm - 3:00pm T 14/14 6026P Learning Through Drama 3:00pm - 3:50pm T 3/5	30 97005P World of Water: Dcaan Detectiva Kit 10:00am - 10:30am L 1/5 97048 Passport to Knowladga: Liva From Antarctica II 1:00pm - 2:00pm L 2/3 6062 Dinosaurs and You 2:00pm - 2:50pm T 1/2 97007P World of Water 3:00pm - 3:50pm L 7/15	31 6015P Our Living World 10:00am - 10:50am T 1/3 97010 Children's Authors and Illustretors 2-3 12:00pm - 12:50pm T 1/1 97023 Echangas 1:00pm - 1:50pm R 2/4 6062 Dinosaurs and You 2:00pm - 2:50pm T 2/2 97005P World of Water: Dcaan Detectiva Kit 3:00pm - 3:30pm R 1/5	

Daily Broadcast Schedule

MCET broadcasts daily
9:00am-8:00pm Eastern Time.

Calendar Listings

This calendar lists courses by: program code, title, start time, interactive status and program series number. (For example: 3/5 = the 3rd session in a 5-session program.)

Programs marked with **L** are live and interactive.

R shows are rebroadcasts of programs from this season.

T shows are taped programs.

Note: Programs subject to change.

FEBRUARY 97

Sunday	Monday	Tuesday
2	3 97007P World of Water 10:00am - 10:50am R 7/15 97018 What's in a Song? 2:00pm - 2:50pm R 1/1 97064P A Question of Science: Sciance for K-8 Teachars 3:00pm - 4:30pm L 2/10	4 **Annenberg/CPB Channel** (11:00am-1:00pm, 4:00pm-6:00pm, 6:00pm-8:00pm) *Science Images* *Programs 7 and 8* *Challenge Me!* *Module 3* Please refer to pages 48 and 49 for complete Annenberg/CPB Channel listings.
9	10 97011 Childran's Authors and Illustrators 1-3 10:00am - 10:50am T 1/1 97046 Children's Authors and Illustrators 6-8 1:00pm - 1:50pm T 1/1 97023 Echanges 2:00pm - 2:50pm R 3/4 97064P A Question of Sciance: Scianca for K-8 Teachars 3:00pm - 4:30pm L 3/10 97065 Board of Ed. Meeting 4:30pm - 8:30pm T	11 **Annenberg/CPB Channel** (11:00am-1:00pm, 4:00pm-6:00pm, 6:00pm-8:00pm) *Video Case Studies in Science Education* *Science Simply Amazing* Please refer to pages 48 and 49 for complete Annenberg/CPB Channel listings.
16	17 Presidents' Day	18 Winter
23	24 97058 Youthlinks: Youth Empowaring Youth To Improva Haalth 10:00am - 10:50am R 4/6 97033P Teke Off! Part II 1:00pm - 1:50pm L 2/7 97029 Future Shock 2:00pm - 2:50pm R 4/6 97064P A Question of Science: Sciance for K-8 Teachers 3:00pm - 4:30pm L 4/10	25 **Annenberg/CPB Channel** (3:15pm-5:15pm, 6:15pm-8:15pm) *Live, Interactive Teacher Workshop 1 on Science Education* Please refer to pages 48 and 49 for complete Annenberg/CPB Channel listings.

Wednesday	Thursday	Friday	Saturday
			1
5 97005P World of Water: Ocean Detective Kit 10:00am - 10:30am R 1/5 6053P Geology 12:00pm - 12:50pm T 3/8 97023 Echanges 1:00pm - 1:50pm L 3/4 97051P Telecommunicate!: Creating a Classroom Home Pege 2:00pm - 2:50pm T 1/3 6026P Learning Through Orama 3:00pm - 3:50pm T 4/5	**6** 97048 Passport to Knowledge: Live From Antarctica II 1:00pm - 2:00pm L 3/3 97051P Telecommunicate!: Creating a Classroom Home Page 2:00pm - 2:50pm T 2/3 97033P Take Off! Part II 3:00pm - 3:50pm L 1/7	**7** 6015P Our Living World 10:00am - 10:50am T 2/3 97023 Echanges 11:00am - 11:50am R 3/4 97045 Children's Authors and Illustrators 3-5 12:00pm - 12:50pm T 1/1 97007P World of Water: 1:00pm - 1:50pm R 7/15 97051P Telecommunicate!: Creating a Classroom Home Paga 2:00pm - 2:50pm T 3/3	**8**
12 97058 Youthlinks: Youth Empowering Youth To Improve Health 10:00am - 10:50am L 4/6 97033P Taka Off! Part II 11:00am - 11:50am R 1/7 6053P Geology 12:00pm - 12:50pm T 4/8 6026P Learning Through Orama 3:00pm - 3:50pm T 5/5	**13** 97005P World of Water: Ocean Detective Kit 10:00am - 10:30am L 2/5 97007P World of Water 1:00pm - 1:30pm L 8/15 3062 Mass Performance: The Wooden Horse Russian Puppet Theater 2:00pm - 2:50pm T 1/1 97052P Telecommunicate!: Exploring the Internet 3:00pm - 3:50pm L 1/4	**14** 6015P Our Living World 10:00am - 10:50am T 3/3 97007P World of Water 11:00am - 11:30am R 8/15 97033P Take Off! Part II 12:00pm - 12:50pm R 1/7 97005P World of Water: Ocean Detective Kit 1:00pm - 1:30pm R 2/5 97058 Youthlinks: Youth Empowering Youth To Improve Health 2:00pm - 2:50pm R 4/6 97052P Telecommunicate!: Exploring the Internet 3:00pm - 3:50pm R 1/4	**15**
19 acation	**20** 97029 Future Shock 3:00pm - 3:50pm L 4/6	**21**	**22**
26 97052P Telacommunicate!: Exploring the Internet 10:00am - 10:50am R 1/4 97027P EnviroNet: Bugs, Bats, and Coyotas 11:00am - 11:50am T 1/4 6053P Geology 12:00pm - 12:50pm T 5/8 97007P World of Watar 2:00pm - 2:30pm R 8/15	**27** 97005P World of Water: Ocean Detective Kit 10:00am - 10:30am R 2/5 97007P World of Water 1:00pm - 1:30pm L 9/15 97033P Take Off! Part II 2:00pm - 2:50pm R 2/7 97059P Integrating Technology & Health Into Your Curriculum 3:00pm - 3:50pm L 4/6	**28** 97059P Integrating Technology & Health Into Your Curriculum 10:00am - 10:50am R 4/6 6087P Our Living World: The Changing Nature of Trees 11:00am - 11:50am T 1/4 97029 Future Shock 12:00pm - 12:50pm R 4/6 6068P Mathematics of the Arts for Students 1:00pm - 1:50pm T 1/1	

Daily Broadcast Schedule

MCET broadcasts daily 9:00am-8:00pm Eastern Time.

Calendar Listings

This calendar lists courses by: program code, title, start time, interactive status and program series number. (For example: 3/5 = the 3rd session in a 5-session program.)

Programs marked with **L** are live and interactive.

R shows are rebroadcasts of programs from this season.

T shows are taped programs.

Note: Programs subject to change.

MARCH 97

Sunday	Monday	Tuesday
2	**3** 97033P Teke Off! Part II 10:00em - 10:50am R 2/7 97003P Mystery Writers 2:00pm - 2:50pm T 1/7 97064P A Question of Science: Science for K-8 Teachers 3:00pm - 4:30pm L 5/10	**4** **Annenberg/CPB Channel** (3:15pm-5:15pm, 6:15pm-8:15pm) *Live, Interactive Teacher Workshop 2 on Science Education* Please refer to pages 48 and 49 for complete Annenberg/CPB Channel listings.
9	**10** 97015P Methematics of the Arts: Quilting 10:00em - 10:50am R 1/5 97033P Take Off! Part II 1:00pm - 1:50pm L 3/7 97003P Mystery Writers 2:00pm - 2:50pm T 2/7 97064P A Question of Science: Science for K-8 Teachers 3:00pm - 4:30pm L 6/10 97065 Board of Ed. Meeting 4:30pm - 8:30pm T	**11** **Annenberg/CPB Channel** (3:15pm-5:15pm, 6:15pm-8:15pm) *Live, Interactive Teacher Workshop 3 on Science Education* Please refer to pages 48 and 49 for complete Annenberg/CPB Channel listings.
16	**17** 97058 Youthlinks: Youth Empowering Youth To Improve Heelth 10:00em - 10:50am R 5/6 97049 Mutations Ceuse Disease: What Causes Mutations? 1:00pm - 1:50pm L 1/3 97003P Mystery Writers 2:00pm - 2:50pm T 3/7 97007P World of Water 3:00pm - 3:30pm R 10/15	**18** **Annenberg/CPB Channel** (3:15pm-5:15pm, 6:15pm-8:15pm) *Live, Interactive Teacher Workshop 4 on Science Education* Please refer to pages 48 and 49 for complete Annenberg/CPB Channel listings.
23	**24** 97029 Future Shock 10:00em - 10:50em R 5/6 97033P Take Off! Part II 1:00pm - 1:50pm L 4/7 97003P Mystery Writers 2:00pm - 2:50pm T 4/7 97064P A Question of Science: Science for K-8 Teechers 3:00pm - 4:30pm L 7/10	**25** **Annenberg/CPB Channel** (3:15pm-5:15pm, 6:15pm-8:15pm) *Live, Interactive Teacher Workshop 5 on Science Education* Please refer to pages 48 and 49 for complete Annenberg/CPB Channel listings.
30	**31** 97059P Integreting Technology & Heelth Into Your Curriculum 10:00em - 10:50em R 5/6 97033P Teke Off! Pert II 1:00pm - 1:50pm R 4/7 97003P Mystery Writers 2:00pm - 2:50pm T 5/7 97064P A Question of Science: Science for K-8 Teechers 3:00pm - 4:30pm L 8/10	

Wednesday	Thursday	Friday	Saturday
5	**6**	**7**	**8**
97027P EnviroNet: Bugs, Bats, and Coyotas 11:00am - 11:50am T 2/4 6053P Geology 12:00pm - 12:50pm T 6/8 97007P World of Watar 2:00pm - 2:30pm R 9/15 97015P Mathematics of tha Arts: Quilting 3:00pm - 3:50pm L 1/5	97002 Lifa's a Breeze: The Art (and Scianca) of Kiting 10:00am - 10:50am L 1/1 97036 Learning to Lead 1:00pm - 1:50pm L 1/3 97046 Childran's Authors and Illustrators 6-8 2:00pm - 2:50pm T 1/1 97007P World of Watar 3:00pm - 3:30pm R 9/15	97002 Lifa's a Braaza: Tha Art (end Sciance) of Kiting 10:00am - 10:50am R 1/1 6087P Our Living World: Tha Changing Natura of Trees 11:00am - 11:50em T 2/4 97036 Laarning to Lead 12:00pm - 12:50pm R 1/3 6064P All About Visual Art: Graat Works of Europe 1:00pm - 1:50pm T 1/3 97059P Intagrating Tachnology & Haalth into Your Curriculum 2:00pm - 2:50pm R 4/6 97015P Mathematics of tha Arts: Quilting 3:00pm - 3:50pm R 1/5	
12	**13**	**14**	**15**
97058 Youthlinks: Youth Empowering Youth To Improva Health 10:00am -10:50em L 5/6 97027P EnviroNet: Bugs, Bats, and Coyotes 11:00em - 11:50am T 3/4 6053P Geology 12:00pm - 12:50pm T 7/8 97045 Childran's Authors and Illustrators 3-5 1:00pm - 1:50pm T 1/1 97033P Taka Off! Part II 2:00pm - 2:50pm R 3/7 97036 Learning to Lead 3:00pm - 3:50pm R 1/3	97033P Taka Off! Part II 10:00am - 10:50am R 3/7 97007P World of Water 1:00pm - 1:30pm L 10/15 97002 Life's e Breeze: Tha Art (and Sciance) of Kiting 2:00pm - 2:50pm R 1/1 97052P Talecommunicata!: Exploring tha Internat 3:00pm - 3:50pm L 2/4	97052P Talecommunicate!: Exploring the Internat 10:00am - 10:50em R 2/4 6087P Our Living World: Tha Changing Natura of Treas 11:00am - 11:50am T 3/4 97058 Youthlinks: Youth Empowaring Youth To Improva Haalth 12:00pm - 12:50pm R 5/6 6064P All About Visual Art: Great Works of Europa 1:00pm - 1:50pm T 2/3	
19	**20**	**21**	**22**
97007P World of Water 10:00am - 10:30am R 10/15 97027P EnviroNet: Bugs, Bats, and Coyotas 11:00am - 11:50am T 4/4 6053P Gaology 12:00pm - 12:50pm T 8/8 97049 Mutations Cause Disease: What Causas Mutations? 1:00pm - 1:50pm R 1/3 97052P Talacommunicate!: Exploring the Internet 2:00pm - 2:50pm R 2/4 3062 Mass Parformanca: Tha Woodan Horsa Russian Puppet Theatar 3:00pm - 3:50pm T 1/1	97042 Seasons on Drumlin Farm 10:00am - 10:50am L 1/1 97036 Laarning to Laad 1:00pm - 1:50pm L 2/3 97049 Mutations Cause Disaasa: What Causes Mutations? 2:00pm - 2:50pm R 1/3 97029 Futura Shock 3:00pm - 3:50pm L 5/6	97015P Mathamatics of tha Arts: Ouilting 10:00am - 10:50am L 2/5 6087P Our Living World: Tha Changing Nature of Trees 11:00em - 11:50am T 4/4 97029 Future Shock 12:00pm - 12:50pm R 5/6 6064P All About Visual Art: Great Works of Europa 1:00pm - 1:50pm T 3/3 97042 Seasons on Drumlin Farm 2:00pm - 2:50pm R 1/1 97036 Laarning to Laad 3:00pm - 3:50pm R 2/3	
26	**27**	**28**	**29**
97015P Mathematics of the Arts: Quilting 10:00am - 10:50am R 2/5 97042 Saasons on Drumlin Farm 11:00am - 11:50am R 1/1 97006P Meteorology: Just Dew It! 12:00pm - 12:50pm T 1/9 97004 Under the Doma 1:00pm - 1:50pm L 1/1 97036 Learning to Leed 2:00pm - 2:50pm R 2/3	97033P Taka Off! Part II 10:00am - 10:50am R 4/7 97007P World of Weter 1:00pm - 1:30pm L 11/15 97004 Undar tha Doma 2:00pm - 2:50pm R 1/1 97059P Intagrating Tachnology & Health Into Your Curriculum 3:00pm - 3:50pm L 5/6		

APRIL 97

Daily Broadcast Schedule

MCET broadcasts daily 9:00am-8:00pm Eastern Time.

Calendar Listings

This calendar lists courses by: program code, title, start time, interactive status and program series number. (For example: 3/5 = the 3rd session in a 5-session program.)

Programs marked with **L** are live and interactive.

R shows are rebroadcasts of programs from this season.

T shows are taped programs.

Note: Programs subject to change.

Sunday	Monday	Tuesday
		1 **Annenberg/CPB Channel** **(3:15pm-5:15pm, 6:15pm-8:15pm)** *Live, Interactive Teacher Workshop 6 on Science Education* Please refer to pages 48 and 49 for complete Annenberg/CPB Channel listings.
6	**7** 3062 Mass Performance: Tha Wooden Horse Russian Puppet Theater 10:00am - 10:50am T 1/1 97033P Take Off! Part II 1:00pm - 1:50pm L 5/7 97003P Mystery Writars 2:00pm - 2:50pm T 6/7 97064P A Quastion of Scienca: Science for K-8 Taachers 3:00pm - 4:30pm L 9/10	**8** **Annenberg/CPB Channel** **(3:15pm-5:15pm, 6:15pm-8:15pm)** *Live, Interactive Teacher Workshop 7 on Science Education* Please refer to pages 48 and 49 for complete Annenberg/CPB Channel listings.
13	**14** 97033P Take Off! Part II 10:00am - 10:50am R 5/7 97049 Mutations Causa Oisaase: What Causes Mutations? 1:00pm - 1:50pm L 2/3 97003P Mystery Writars 2:00pm - 2:50pm T 7/7 97064P A Question of Science: Scienca for K-8 Teachers 3:00pm - 4:30pm L 10/10 97065 Board of Ed. Meeting: 4:30pm - 8:30pm T	**15** **Annenberg/CPB Channel** **(3:15pm-5:15pm, 6:15pm-8:15pm)** *Live, Interactive Teacher Workshop 8 on Science Education* Please refer to pages 48 and 49 for complete Annenberg/CPB Channel listings.
20	**21** Patriots Day	**22** Spring
27	**28** 97052P Telecommunicate!: Exploring tha Internet 10:00am - 10:50am R 3/4 97033P Take Off! Part II 1:00pm - 1:50pm L 6/7	**29** **Annenberg/CPB Channel** **(11:00am-1:00pm, 4:00pm-6:00pm, 6:00pm-8:00pm)** *Private Universe Teacher Workshops* *Visualizing Growth: Seasons* Please refer to pages 48 and 49 for complete Annenberg/CPB Channel listings.

Wednesday	Thursday	Friday	Saturday
2 97004 Under the Dome 10:00am - 10:50am R 1/1 97007P World of Water 11:00em - 11:30em R 11/15 97006P Meteorology: Just Dew It! 12:00pm - 12:50pm T 2/9 97023 Echenges 1:00pm - 1:50pm L 4/4 97059P Integrating Technology & Health Into Your Curriculum 2:00pm - 2:50pm R 5/6	**3** 97023 Echanges 10:00am - 10:50am R 4/4 97015P Mathematics of the Arts: Quilting 2:00pm - 2:50pm R 2/5	**4** 97015P Mathematics of the Arts: Quilting 10:00am - 10:50am L 3/5 3103 Teacher in Electronic Residence 12:00pm - 12:50pm T 1/3 97045 Children's Authors end Illustrators 3-5 1:00pm - 1:50pm T 1/1 97007P World of Water 2:00pm - 2:30pm R 11/15	**5**
9 97058 Youthlinks: Youth Empowering Youth To Improve Heelth 10:00am - 10:50em L 6/6 97015P Methematics of the Arts: Quilting 11:00em - 11:50em R 3/5 97006P Meteorology: Just Dew It! 12:00pm - 12:50pm T 3/9 97033P Take Off! Part II 2:00pm - 2:50pm R 5/7	**10** 97005P World of Water: Ocean Detective Kit 10:00am - 10:30am L 3/5 97007P World of Water 1:00pm - 1:30pm L 12/15 97023 Echenges 2:00pm - 2:50pm R 4/4 97052P Telecommunicate!: Exploring the Internet 3:00pm - 3:50pm L 3/4	**11** 97015P Mathematics of the Arts: Quilting 10:00am - 10:50em L 4/5 97058 Youthlinks: Youth Empowering Youth To Improve Health 11:00em - 11:50am R 6/6 3104 Teacher in Electronic Residence 12:00pm - 12:50pm T 2/3 97005P World of Water: Oceen Detective Kit 1:00pm - 1:30pm R 3/5 97007P World of Water 2:00pm - 2:30pm R 12/15 97015P Methematics of the Arts: Quilting 3:00pm - 3:50pm R 3/5	**12**
16 97010 Children's Authors end Illustrators 2-3 10:00am - 10:50am T 1/1 97005P World of Water: Oceen Detective Kit 11:00em - 11:30am R 3/5 97006P Meteorology: Just Dew It! 12:00pm - 12:50pm T 4/9 97015P Mathemetics of the Arts: Quilting 1:00pm - 1:50pm R 4/5 97058 Youthlinks: Youth Empowering Youth To Improve Heelth 2:00pm - 2:50pm R 6/6 97052P Telecommunicate!: Exploring the Internet 3:00pm - 3:50pm R 3/4	**17** 97007P World of Water 10:00am - 10:30am R 12/15 97036 Learning to Leed 1:00pm - 1:50pm L 3/3 97049 Mutations Cause Diseese: Whet Causes Mutations? 2:00pm - 2:50pm R 2/3 97029 Future Shock 3:00pm - 3:50pm L 6/6	**18** 97015P Mathematics of the Arts: Quilting 10:00am - 10:50am R 4/5 97029 Future Shock 11:00am - 11:50em R 6/6 3106 Teecher in Electronic Residence 12:00pm - 12:50pm T 3/3 97046 Children's Authors and Illustrators 6-8 3:00pm - 3:50pm T 1/1	**19**
23	**24**	**25**	**26**
30 97049 Mutations Cause Diseese: What Causes Mutations? 10:00am - 10:50am R 2/3 97033P Take Off! Part II 11:00am - 11:50am R 6/7 97006P Meteorology: Just Dew It! 12:00pm - 12:50pm T 5/9 97029 Future Shock 2:00pm - 2:50pm R 6/6 97036 Learning to Lead 3:00pm - 3:50pm R 3/3			

Daily Broadcast Schedule

MCET broadcasts daily
9:00am-8:00pm Eastern Time.

Calendar Listings

This calendar lists courses by: program code, title, start time, interactive status and program series number. (For example: 3/5 = the 3rd session in a 5-session program.)

Programs marked with **L** are live and interactive.

R shows are rebroadcasts of programs from this season.

T shows are taped programs.

Note: Programs subject to change.

MAY 97

Sunday	Monday	Tuesday
4	5 97036 Learning to Lead 10:00am - 10:50am R 3/3 97033P Take Off! Part II 1:00pm - 1:50pm L 7/7 97005P World of Water: Ocean Detective Kit 2:00pm - 2:30pm R 4/5 97010 Children's Authors and Illustrators 2-3 3:00pm - 3:50pm T 1/1	6 **Annenberg/CPB Channel** (3:15pm-5:15pm, 6:15pm-8:15pm) *Live, Interactive Forum* Please refer to pages 48 and 49 for complete Annenberg/CPB Channel listings.
11	12 97033P Taka Off! Part II 10:00am - 10:50am R 7/7 97049 Mutations Cause Disease: What Causes Mutations? 1:00pm - 1:50pm L 3/3 97013 Mass Performance: Odaiko New England 6-8 2:00pm - 2:50pm R 1/1 97052P Telecommunicate!: Exploring tha Internat 3:00pm - 3:50pm R 4/4 97065 Board of Ed. Meeting: 4:00pm - 8:00pm T	13 **Annenberg/CPB Channel** (11:00am-1:00pm, 4:00pm-6:00pm, 6:00pm-8:00pm) *Private Universe: Photosynthesis* *Visualizing Growth: Insects* Please refer to pages 48 and 49 for complete Annenberg/CPB Channel listings.
18	19 97007P World of Water 10:00am - 10:30am R 14/15 97046 Children's Authors and Illustrators 6-8 1:00pm - 1:50pm T 1/1 97049 Mutations Causa Diseasa: What Causes Mutations? 3:00pm - 3:50pm R 3/3	20 **Annenberg/CPB Channel** (11:00am-1:00pm, 4:00pm-6:00pm, 6:00pm-8:00pm) *Private Universe: Electricity* *Visualizing Growth: Simple Machines* Please refer to pages 48 and 49 for complete Annenberg/CPB Channel listings.
25	26 Memorial Day	27 **Annenberg/CPB Channel** (11:00am-1:00pm, 4:00pm-6:00pm, 6:00pm-8:00pm) *Private Universe: Particles* *Visualizing Growth: Ducks* Please refer to pages 48 and 49 for complete Annenberg/CPB Channel listings.

Wednesday	Thursday	Friday	Saturday
	1 97005P World of Water: Ocean Detective Kit 10:00am - 10:30am L 4/5 97007P World of Water 1:00pm - 1:30pm L 13/15 97011 Children's Authors and Illustrators 1-3 2:00pm - 2:50pm T 1/1 97059P Integrating Technology & Health Into Your Curriculum 3:00pm - 3:50pm L 6/6	**2** 97015P Mathematics of the Arts: Quilting 10:00am - 10:50am L 5/5 97059P Integrating Technology & Health Into Your Curriculum 11:00am - 11:50am R 6/6 6004 Mass Performance: Journey Into Jazz 12:00pm - 12:50pm T 1/1 97007P World of Water 2:00pm - 2:30pm R 13/15 97033P Take Off! Part II 3:00pm - 3:50pm R 6/7	**3**
7 97005P World of Water: Ocean Detective Kit 10:00am - 10:30am R 4/5 97007P World of Water 11:00am - 11:30am R 13/15 97006P Meteorology: Just Daw It! 12:00pm - 12:50pm T 6/9 97015P Mathematics of the Arts: Quilting 1:00pm - 1:50pm R 5/5 97059P Integrating Technology & Health into Your Curriculum 2:00pm - 2:50pm R 6/6	**8** 97012 Mass Performance: Odaiko New England K-2 10:00am - 10:30am L 1/1 97013 Mass Performance: Odaiko New England 6-8 1:00pm - 1:50pm L 1/1 97011 Children's Authors and Illustrators 1-3 2:00pm - 2:50pm T 1/1 97052P Telecommunicate!: Exploring the Internet 3:00pm - 3:50pm L 4/4	**9** 97015P Mathematics of the Arts: Quilting 10:00am - 10:50am R 5/5 97013 Mass Performance: Odaiko Naw England 6-8 11:00am - 11:50am R 1/1 6004 Mass Performance: Journey Into Jazz 12:00pm - 12:50pm T 1/1 97033P Take Off! Part II 2:00pm - 2:50pm R 7/7 97012 Mass Performance: Odaiko New England K-2 3:00pm - 3:30pm R 1/1	**10**
14 97049 Mutations Causa Disease: What Causes Mutations? 10:00am - 10:50am R 3/3 97012 Mass Performanca: Odaiko New England K-2 11:00am - 11:30am R 1/1 97006P Meteorology: Just Dew It! 12:00pm - 12:50pm T 7/9	**15** 97005P World of Water: Ocean Detective Kit 10:00am - 10:30am L 5/5 97007P World of Water 1:00pm - 1:30pm L 14/15 97011 Children's Authors and Illustrators 1-3 2:00pm - 2:50pm T 1/1	**16** 97052P Telecommunicate!: Exploring the Internet 10:00am - 10:50am R 4/4 97010 Children's Authors and Illustrators 2-3 11:00am - 11:50am T 1/1 6004 Mass Performance: Journay Into Jazz 12:00pm - 12:50pm T 1/1 97005P World of Water: Ocaen Detective Kit 1:00pm - 1:30pm R 5/5	**17**
21 97005P World of Water: Ocean Detective Kit 11:00am - 11:30am R 5/5 97006P Meteorology: Just Daw It! 12:00pm - 12:50pm T 8/9	**22** 97011 Children's Authors and Illustrators 1-3 2:00pm - 2:50pm T 1/1 97007P World of Water 3:00pm - 3:30pm R 14/15	**23** 97045 Children's Authors and Illustrators 3-5 11:00am - 11:50am T 1/1 6004 Mass Performance: Journey Into Jazz 12:00pm - 12:50pm T 1/1	**24**
28 3062 Mess Performanca: Tha Woodan Horse Russian Puppet Theatar 11:00am - 11:50am T 1/1 97006P Meteorology: Just Dew It! 12:00pm - 12:50pm T 9/9	**29** 97007P World of Water 1:00pm - 1:30pm L 15/15 97011 Children's Authors and Illustrators 1-3 2:00pm - 2:50pm T 1/1 97033P Take Off! Part II 3:00pm - 3:50pm R 1/7	**30** 97007P World of Watar 11:00am - 11:30am R 15/15 6004 Mess Performance: Journey Into Jazz 12:00pm - 12:50pm T 1/1 97033P Take Off! Part II 3:00pm - 3:50pm R 2/7	**31**

Daily Broadcast Schedule

MCET broadcasts daily 9:00am-8:00pm Eastern Time.

Calendar Listings

This calendar lists courses by: program code, title, start time, interactive status and program series number. (For example: 3/5 = the 3rd session in a 5-session program.)

Programs marked with **L** are live and interactive.

R shows are rebroadcasts of programs from this season.

T shows are taped programs.

Note: Programs subject to change.

JUNE 97

Sunday	Monday	Tuesday
1	2 97007P World of Water 10:00em - 10:50am R 1/15 97059P Integreting Technology & Haalth Into Your Curriculum 1:00pm - 1:50pm R 1/6 97042 Saasons on Drumlin Farm 2:00pm - 2:50pm R 1/1 97033P Take Off! Part II 3:00pm - 3:50pm R 3/7	3 97007P World ol Weter 10:00am - 10:30em R 2/15 97059P Integreting Technology & Health Into Your Curriculum 1:00pm - 1:50pm R 2/6 97004 Under the Dome 2:00pm - 2:50pm R 1/1 97033P Take Off! Pert II 3:00pm - 3:50pm R 4/7
8	9 97007P World of Weter 10:00em - 10:30am R 6/15 97059P Integreting Tachnology & Health Into Your Curriculum 1:00pm - 1:50pm R 6/6 97023 Echanges 2:00pm - 2:50pm R 3/4 97015P Mathametics of the Arts: Quilting 3:00pm - 3:50pm R 1/5	10 97007P World of Water 10:00am - 10:50am R 7/15 97036 Learning to Leed 1:00pm - 1:50pm R 1/3 97023 Echanges 2:00pm - 2:50pm R 4/4 97015P Mathamatics of tha Arts: Quilting 3:00pm - 3:50pm R 2/5
15	16 97007P World of Weter 10:00am - 10:30em R 11/15 97005P World of Weter: Ocaan Detactive Kit 11:00am - 11:30am R 1/5 97058 YouthLinks: Youth Empowering Youth To Improve Health 12:00pm - 12:50pm R 2/6 97064P A Question of Science: Scienca for K-8 Teachers 1:00pm - 2:30pm R 1/10 97064P A Quastion ol Scianca: Scienca lor K-8 Teechers 2:30pm - 4:00pm R 2/10 97065 Boerd of Ed. Meeting 4:00pm - 8:00pm T	17 97007P World of Weter 10:00am - 10:30am R 12/15 97005P World of Water: Oceen Detective Kit 11:00am - 11:30am R 2/5 97058 YouthLinks: Youth Empowaring Youth To Improve Health 12:00pm - 12:50pm R 3/6 97064P A Question of Scienca: Science for K-8 Teechers 1:00pm - 2:30pm R 3/10 97064P A Question of Science: Science lor K-8 Teechers 2:30pm - 4:00pm R 4/10
22	23	24
29	30	

Wednesday	Thursday	Friday	Saturday
4 97007P World of Weter 10:00am - 10:30am R 3/15 97052P Telecommunicate!: Exploring the Internet 11:00am - 11:50am R 1/4 97012 Mass Performance: Odeiko New England K-2 12:00pm- 12:30pm R 1/1 97059P Integreting Technology & Health Into Your Curriculum 1:00pm - 1:50pm R 3/6 97007P World of Water 2:00pm - 2:30pm R 15/15 97033P Take Off! Pert II 3:00pm - 3:50pm R 5/7	**5** 97007P World of Water 10:00am - 10:30am R 4/15 97059P Integreting Technology & Health Into Your Curriculum 1:00pm - 1:50pm R 4/6 97023 Echanges 2:00pm - 2:50pm R 1/4 97033P Teke Off! Part II 3:00pm - 3:50pm R 6/7	**6** 97007P World of Water 10:00am - 10:30em R 5/15 97052P Telecommunicete!: Exploring the Internet 11:00am - 11:50am R 2/4 97013 Mass Performence: Odaiko New England 6-8 12:00pm -12:50pm R 1/1 97059P Integrating Technology & Health Into Your Curriculum 1:00pm - 1:50pm R 5/6 97023 Echenges 2:00pm - 2:50pm R 2/4 97033P Take Off! Part II 3:00pm - 3:50pm R 7/7	**7**
11 97007P World of Weter 10:00am - 10:30am R 8/15 97052P Telecommunicate!: Exploring the Internet 11:00am - 11:50am R 3/4 97002 Life's e Breeze: The Art (and Science) of Kiting 12:00pm - 12:50pm R 1/1 97036 Learning to Lead 1:00pm - 1:50pm R 2/3 97012 Mass Performance: Odaiko New England K-2 2:00pm - 2:30pm R 1/1 97015P Mathematics of the Arts: Quilting 3:00pm - 3:50pm R 3/5	**12** 97007P World of Weter 10:00am - 10:30am R 9/15 97036 Learning to Lead 1:00pm - 1:50pm R 3/3 97013 Mass Performance: Odaiko New England 6-8 2:00pm - 2:50pm R 1/1 97015P Mathematics of the Arts: Quilting 3:00pm - 3:50pm R 4/5	**13** 97007P World of Water 10:00am - 10:30am R 10/15 97052P Telecommunicete!: Exploring the Internet 11:00am - 11:50em R 4/4 97058 Youthlinks: Youth Empowering Youth To Improve Health 12:00pm - 12:50pm R 1/6 97018 What's in a Song? 1:00pm - 1:50pm R 1/1 97002 Life's a Breeze: The Art (and Science) of Kiting 2:00pm - 2:50pm R 1/1 97015P Methemetics of the Arts: Quilting 3:00pm - 3:50pm R 5/5	**14**
18 97007P World of Water 10:00am - 10:30am R 13/15 97005P World of Water: Ocean Oetective Kit 11:00am - 11:30am R 3/5 97058 YouthLinks: Youth Empowering Youth To Improve Health 12:00pm - 12:50pm R 4/6 97064P A Question of Science: Science for K-8 Teachers 1:00pm - 2:30pm R 5/10 97064P A Question of Science: Science for K-8 Teachers 2:30pm - 4:00pm R 6/10	**19** 97007P World of Water 10:00am - 10:30am R 14/15 97005P World of Water: Ocean Oetective Kit 11:00am - 11:30am R 4/5 97058 YouthLinks: Youth Empowering Youth To Improve Health 12:00pm - 12:50pm R 5/6 97064P A Question of Science: Science for K-8 Teachers 1:00pm - 2:30pm R 7/10 97064P A Question of Science: Science for K-8 Teachers 2:30pm - 4:00pm R 8/10	**20** 97007P World of Water 10:00em - 10:30em R 15/15 97005P World of Water: Ocean Oetective Kit 11:00am - 11:30am R 5/5 97058 YouthLinks: Youth Empowering Youth To Improve Health 12:00pm - 12:50pm R 6/6 97064P A Question of Science: Science for K-8 Teachers 1:00pm - 2:30pm R 9/10 97064P A Question of Science: Science for K-8 Teachers 2:30pm - 4:00pm R 10/10	**21**
25	**26**	**27**	**28**

Program Listings by Subject

Subject	Program Title	Code	Audience	Page
An Invitation from MCET...	*Welcome to the MLP and MEOL*	97000	Educators (all levels)	16
The Arts	*What's in a Song?*	97018	Grades 4-6	32
The Arts	*Life's a Breeze: the Art (and Science) of Kiting*	97002	Grades 4-6	30
The Arts	*Mass Performance: Odaiko New England*	97012	Grades K-2	18
The Arts	*Mass Performance: Odaiko New England*	97013	Grades 6-8	26
The Arts, Mathematics	*Mathematics of the Arts: Quilting*	97015P	Grades 6-8	28
Health	*Integrating Technology and Health Into Your Curriculum*	97059P	Teachers Grades 7-12	41
Health	*YouthLinks: Youth Empowering Youth to Improve Health*	97058	Grades 7-12	34
Mathematics, Science	*Annenberg/CPB Channel*	97041P	Teachers Grades K-12	46
Science, Health	*Mutations Cause Disease: What Causes Mutations?*	97049	Grades 9-12	40
Science	*Passport to Knowledge — Live From Antarctica II*	97048	Grades 6-8, Teachers, Educators	24
Science	*A Question of Science: Science for K-8 Teachers*	97064P	Teachers Grades K-8	44
Science and Technology	*Take Off! Part II*	97033P	Grades 9-12	38
Science and Technology	*Telecommunicate!: Exploring the Internet*	97052P	Teachers Grades K-12	43
Science and Technology, Social Studies	*Winter Into Spring: Seasons on Drumlin Farm*	97042	Grades 1-3	17
Science and Technology, Social Studies	*New England Aquarium's World of Water: Ocean Detective Kit*	97005P	Grades K-2	20
Science and Technology, Social Studies	*New England Aquarium's World of Water*	97007P	Grades 3-6	22
Social Studies	*Under the Dome: The State Legislative Process*	97004	Grades 9-12	36
Social Studies	*Learning to Lead*	97036	Grades 8-12	37
Trends in Education	*Future Shock*	97029	Higher Ed.	42
World Languages	*Echanges*	97023	Grades 9-12	35

MCET Registration Form

Please duplicate and use a separate form for each program.

Program Title: _____

Program Code: _____

Number of Teachers/Educators Participating: _____

Number of Students Participating: _____

Grade/Subject: _____

MCET School Code: ☐☐☐☐☐☐

(Check with your Network Liaison to find out the MCET code for your school or call MCET Customer Service at 1-800-556-4376.) Out-of-state registrants do not need an MCET school code.

Please check all that apply:

- ☐ We will participate in the live broadcast.
- ☐ We will tape the broadcast for future use.
- ☐ We will participate by E-mail (Mass Ed Online LearnNet).
- ☐ Hearing-impaired participants will be at the site during broadcast.

Your Name: _____

School: _____

District: _____

School Address: _____
(materials will be mailed to this address; use street address only)

City: _____ State: _____ Zip Code: _____

Phone: _____ Fax: _____

E-mail Address: _____

Signature: _____ Date: _____

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- ☐ I intend to earn PDPs for this program at my regular MCET viewing site. (MA educators only)
- ☐ I intend to earn a Certificate for this program. (Out-of-state educators only)
- ☐ I intend to earn PDPs at an MFT facilitated site for:
  - ☐ Telecommunicate!: Exploring the Internet
  - ☐ A Question of Science: Science for K-8 Teachers
  - ☐ Annenberg/CPB Live Interactive Workshop Series

Reminder:

You must use a separate registration form for each program.

To Register

Please complete and mail or fax this form to MCET, or you may register over the World Wide Web using the URL: **http://www.mcet.edu**

Please duplicate and use a separate form for each program.

Be sure to notify the Network Liaison in your district when you register for a program.

To ensure that materials are received by program date, please register by the dates indicated below.

Registration Deadlines

If program starts:	**Register before:**
Jan. 20-Feb. 14	Jan. 10
Feb. 17-Mar. 28	Feb. 7
May 5-May 30	Apr. 25

Registrations received after the deadline will be accepted, although timely delivery of materials is not guaranteed.

You may register by mail:

Registration
MCET
One Kendall Square
Building 1500
Cambridge, MA
02139-1562

Or by fax:

(617) 252-5709

Or over the Internet:

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Program Listings in Alphabetical Order

Program Title	Subject	Code	Audience	Page
Annenberg/CPB Channel	Mathematics, Science	97041P	Teachers Grades K-12	46
Echanges	World Languages	97023	Grades 9-12	35
Future Shock	Trends in Education	97029	Higher Ed.	42
Integrating Technology and Health Into Your Curriculum	Health	97059P	Teachers Grades 7-12	41
Learning to Lead	Social Studies	97036	Grades 8-12	37
Life's A Breeze: the Art (and Science) of Kiting	The Arts	97002	Grades 4-6	30
Mass Performance: Odaiko New England	The Arts	97012	Grades K-2	18
Mass Performance: Odaiko New England	The Arts	97013	Grades 6-8	26
Mathematics of the Arts: Quilting	The Arts, Mathematics	97015P	Grades 6-8	28
Mutations Cause Disease: What Causes Mutations?	Science, Health	97049	Grades 9-12	40
New England Aquarium's World of Water	Science and Technology, Social Studies	97007P	Grades 3-6	22
New England Aquarium's World of Water: Ocean Detective Kit	Science and Technology, Social Studies	97005P	Grades K-2	20
Passport to Knowledge — Live From Antarctica II	Science	97048	Grades 6-8, Teachers, Educators	24
A Question of Science: Science for K-8 Teachers	Science	97064P	Teachers Grades K-8	44
Take Off! Part II	Science and Technology	97033P	Grades 9-12	38
Telecommunicate!: Exploring the Internet	Science and Technology	97052P	Teachers Grades K-12	43
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Winter Into Spring: Seasons on Drumlin Farm	Science and Technology, Social Studies	97042	Grades 1-3	17
YouthLinks: Youth Empowering Youth to Improve Health	Health	97058	Grades 7-12	34

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